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KITCHEN MANAGEMENT
IN SCHOOLS, COLLEGES, HOTELS, ETC.

KITCHEN MANAGEMENT

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WITH A FOREWORD BY
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ILLUSTRATED WITH PHOTOGRAPHS
AND PLANS

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FOREWORD

At the moment that this book appears more attention than ever before in our history is being focused on health and physical fitness, and on the fundamental importance of good food if the objective is to be achieved. Simultaneously, many private householders have almost given up the attempt to find or keep a good cook, and though schools, clubs, and hotels are in rather less desperate case, since they can draw upon a wider field, even they have to regard the supply of service as precarious.

Any aid therefore which can be given to meet the dilemma is likely to be received with enthusiasm, and 'Kitchen Management,' with its clear directions; scientific, economical, and attractive suggestions for menus for various types of institutions; and advice on apparatus is likely to have a wide appeal.

One would be glad to believe that every individual or combination of individuals about to construct the kitchens of an institution will read and study the section on kitchen planning. The daily waste of energy in unnecessary labour and consequent irritation endured by those rare and precious creatures, competent and intelligent cooks, in consequence of

inexpert planning of their workshops must be enormous, and is a real deterrent to employment of this kind.

A man, woman, or committee who would turn aside with dismay from the task of planning a car factory or an operating theatre without the aid of a specialist will embark with happy confidence on the planning of a kitchen and kitchen offices. Yet the construction of a car is little more complicated than the food service of the kitchen in a big institution, nor does a factory function for sixteen hours a day on seven days a week and fifty-two weeks a year.

Efficiency in menu planning, food preparation and service, and in the best use of the limited supply of skilled labour available, should be furthered by this publication.

R. W.

March 1939.

CONTENTS

PART ONE

THE INSTITUTIONAL KITCHEN

	PAGE
FOREWORD	V
CHAP.	
I. PREMISES	3
II. LARGE APPARATUS	7
III. LABOUR-SAVING APPARATUS	19
IV. SMALL KITCHEN EQUIPMENT	25
V. SCULLERIES—THE REMOVAL OF REFUSE	30
VI. LARDERS AND COLD STORAGE ROOMS	38
VII. STOREROOMS	44
VIII. SERVERY—HOUSEKEEPER'S ROOM— CHECKING OFFICE	52
IX. PURCHASING KITCHEN STORES—HOUSE- KEEPER'S BOOKS—COSTING	57
X. CLEANING THE KITCHEN PREMISES	65
XI. KITCHEN PLANNING	72
XII. CAFETERIAS	88
XIII. INSTITUTIONAL ACCOUNTS	97

PART TWO

DIETS, MENUS, AND COSTING

	PAGE
DIETS, CATERING, AND MENU PLANNING .	107
MENUS:	
Orphanage catering for 100 Children:	
Summer	116
Orphanage catering for 100 Children:	
Winter	118
Orphanage catering for 100 Children:	
Costing—Winter	120
Boarding-School catering for 100 Boys:	
Summer	128
Boarding-School catering for 100 Boys:	
Winter	130
Boarding-School catering for 100 Girls:	
Summer	132
Boarding-School catering for 100 Girls:	
Winter	134
Costing Analysis of Menu for Girls'	
School catering for 100: Summer .	136
Residential Club catering for 100	
Residents: Winter	148

CONTENTS

ix

MENUS: *continued*

	PAGE.
Men's Hall of Residence catering for 75 Residents: Summer	152
Men's Hall of Residence catering for 75 Residents: Winter	154
Men's Hall of Residence catering for 75 Residents: Costing—Winter	156
Women's Hall of Residence catering for 75 Residents: Costing	162
Approximate Requirements when catering for 20-1,000 People	164

ILLUSTRATIONS

APPARATUS

	FACING PAGE
A VEGETABLE BOILER <i>John Wright & Co. Ltd, Birmingham</i>	7
AN UP-TO-DATE STEAM OVEN <i>John Wright & Co. Ltd, Birmingham</i>	10
A FISH FRYER <i>John Wright & Co. Ltd, Birmingham</i>	12
AN ELECTRIC MIXING MACHINE <i>Hobart Manufacturing Co., London</i>	19
A POTATO PEELER <i>W. M. Still & Sons Ltd, London</i>	20
A BREAD- OR BACON-CUTTING MACHINE <i>W. M. Still & Sons Ltd, London</i>	21
A THREE-COMPARTMENT MODEL DISH- WASHER <i>The 'Euk' Manufacturing Co. Ltd, Edinburgh</i>	22
A DISH-WASHER (SPRAY TYPE) IN WORK- ING SECTION <i>Hobart Manufacturing Co., London</i>	23

ILLUSTRATIONS

xi

FACING PAGE

A PLATE RACK TO BE USED WHEN WASHING- UP BY HAND	30
<i>W. M. Still & Sons Ltd, London</i>	

PLANS

	PAGE
KITCHEN OFFICES	75
SCHOOL KITCHEN CATERING FOR 100-150 .	78-9
KITCHEN OF A COLLEGE HALL OF RESIDENCE .	82-3
KITCHEN CATERING FOR ABOUT 400 PERSONS	86-7
CAFETERIA COUNTER	90

ACKNOWLEDGMENTS

Certain firms have very kindly lent 'blocks' of apparatus and I should like to record here my thanks for the help which they have given me; their names appear in the list of illustrations.

E. M. B.

PART ONE
THE INSTITUTIONAL KITCHEN

CHAPTER I

PREMISES

THE kitchen premises of any institution include the kitchen proper, and any other room or rooms which have any bearing on the storage, preparation, or serving of food. It is an impossibility to dogmatize on the size or number of these rooms, as no two institutions have the same requirements, but the general principles will be the same for all.

THE KITCHEN

This is the workroom for a number of people, here they will spend most of the working hours of the week, so that the conditions provided must be as pleasant and attractive as possible.

Aspect. The main windows should face north or east; the former is considered preferable by many as it is much cooler in the summer months, but the early morning sun from the latter is a great joy and not too hot to cause discomfort to the worker. Vita-glass windows, though more expensive, allow the sun's rays to penetrate, thus providing more ideal conditions for those who must inevitably spend many hours each day indoors.

Walls. These must be of a material which is durable, easily cleaned, and which reflects the light. Tiles best fulfil these conditions, but are expensive, costing about 25s. per square yard, with an additional expenditure if the corners of the walls and the joints between the wall and floor are bevelled, thus avoiding any dust-traps. A less costly wall-covering is a six- to eight-foot dado of tiles, with washable paint above.

Some new materials, glazed asbestos, Granitese, etc., have recently come on to the market: these are very attractive in appearance, and are less costly than tiles, but their wearing properties have not yet been proved.

Painted walls are much cheaper in outlay than tiles, or a tile substitute, though the question of renewal in subsequent years should be considered; it is advisable to cover painted walls with a coat of clear varnish, as this is a much easier surface to clean, or a cellulose paint can be used, making the varnish unnecessary.

Floor. This must be sufficiently strong to bear the weight of heavy apparatus, be easy to clean, non-slippery, non-absorbent, and, as far as possible, resilient to the feet. So far no substance has been found to fulfil all these conditions; quarry tiles are satisfactory in all but the last, but some of the new cement and asphalt compositions seem more resilient and those with a mottled finish are easier to keep clean than tiles.

The cork composition floorings must also be considered as they are easy to clean, resilient, and non-absorbent, but it is doubtful if they will wear as long as some of the harder coverings, where heavy apparatus has to be fixed.

A wood floor entails too much scrubbing, and linoleum cracks very easily, especially round large apparatus.

Slope of Floor. The floor should be constructed to slope slightly towards the main floor drains. In a very large kitchen these may be in the middle of the room, the floor is then hosed down and swept towards the drains; in a smaller kitchen, where it is possible to wash the floor, the only drains necessary are those adjacent to apparatus with an outlet tap, such as boilers and steamers. The slope is then from the floor drain to an outside wall to prevent water from spreading across the kitchen floor.

Ceiling. This should be lofty and is better tiled or painted, as a distempered ceiling absorbs grease which becomes noticeable after some years.

VENTILATION

Cross ventilation is by far the best; this can be obtained by large windows covering half to two-thirds of the way between floor and ceiling on the north or east side, the lower section casements,

with hoppers above, and on the opposite side clerestory windows, also with hoppers.

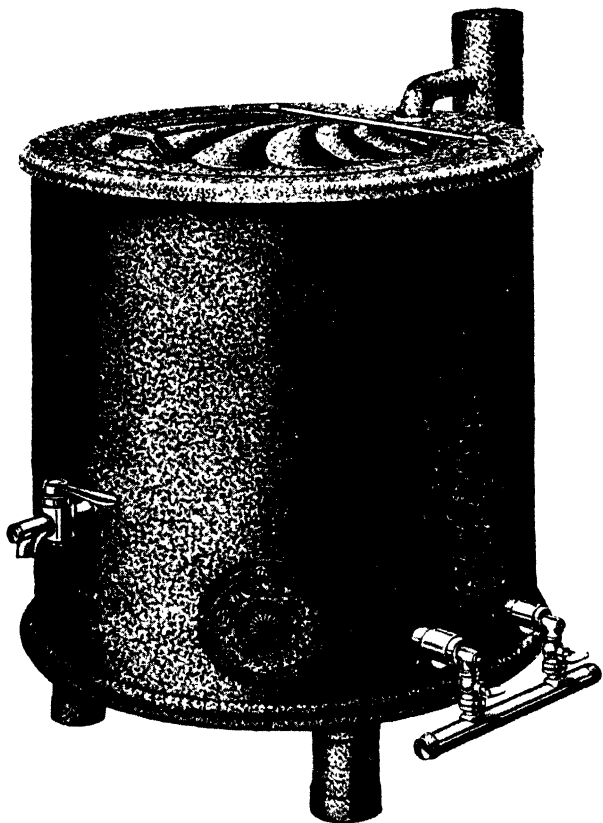
LIGHTING

A good system of ventilation also means a good system of lighting and this, besides being the best, is also the cheapest. Overhead windows must be avoided as these give a glare in the summer and make the kitchen much hotter, while the room is inadequately ventilated.

Artificial lighting must be installed, and at present electricity is the cleanest and the best; each fitting must be so placed that the light falls on the working surface and not on the worker. In a large kitchen it is best to place a light over each piece of apparatus such as stoves, tables, sinks, etc., though in a smaller room central lights well above the eye-level of the worker may be sufficient. To prevent a glare all globes should be covered with a translucent bowl.

STOREROOMS, LARDERS, ETC.

The suggestions made with regard to materials suitable for the kitchen apply also to other rooms connected with this department, though in these there is considerably less wear and tear, so that where expense has to be carefully considered, one of the cheaper substitutes can be used.



A VEGETABLE BOILER

This boiler can be used for vegetables, or with an additional casing is suitable for stews and milk puddings, etc.

CHAPTER II

LARGE APPARATUS

FUEL

BEFORE installing any apparatus it is well to consider the comparative cost and merits of the various types of fuel.

Steam. Many institutions will have their own steam plant, so that it would be most satisfactory and economical to heat boilers, steam ovens, washing-up water, etc., in this way.

Gas. This is still foremost for heating hot plates, as it is quicker than any other type of fuel, and is very good for boilers, etc., where there is no steam plant. Modern gas ovens are clean, economical if properly used, can be thermostatically controlled, and are good for all general purposes in the kitchen.

Electricity. This is particularly good for grills, for roasting ovens and cake ovens; boilers can also be heated in this way, but electric hot plates are less efficient as they heat comparatively slowly.

Coal and Anthracite. An old-fashioned range is almost a thing of the past for large kitchens, but modern storage-heat cookers such as the Aga,

Esse, Briffault, Eveready, etc., must be considered. These, though costly in outlay, are inexpensive to run and require little attention for stoking, but the cook must remember that most of these stoves require time to regain their heat after each meal has been cooked.

On the whole it is advisable not to limit the kitchen to one type of fuel but to choose the best according to the needs of the establishment.

COOKING APPARATUS

Vegetable Boilers. These can be heated by gas, steam, or electricity; they are clamped to the floor, with an inlet tap connected to a sink and an outlet tap over a floor drain. Inside there is either a basket lining which can be lifted out, or a movable perforated sheet at the bottom: in the former case the vegetables can be carried from the preparation room in the basket, but in both cases small pieces of vegetables are prevented from blocking the outlet tap when the water is poured off, and the vegetables can drain well before being dished. A medium-sized boiler, to hold about half a hundredweight, costs from ten guineas. For very large quantities a rotatory handle tilts the boiler, and the lid can be lifted by a pulley.

A cheaper substitute can be obtained by using a galvanized-iron copper, which usually has an

outlet tap; a piece of hose-pipe, connected to the sink, can be used to fill it. A strong boiler of this type costs about two pounds, and will hold forty pounds of potatoes.

Smaller quantities will in all probability be cooked on a hot plate: a stock pot, with an outlet tap, is much better than a saucepan, as the water can be drained off at the stove and the utensil is then very much lighter to carry.

An illustration of a vegetable boiler appears opposite page 7.

Jacketed Boilers. Steam, gas, or electricity can be used to heat this type of boiler, which has a space of about two inches between the outer and inner covering for water to circulate, so that stews, porridge, milk puddings, and other foods which might burn can be cooked without requiring constant attention.

A jacketed boiler to hold twelve gallons costs about sixteen pounds.

Boilerettes, constructed on the same principle as the jacketed boiler, but small enough to stand on a hot plate, are an excellent substitute for the bigger piece of apparatus, especially for foods cooked in smaller quantities, such as sauces and gravies. These hold from four to six quarts and cost from two pounds, according to the quality of the metal used and the size.

Steam Ovens. Ovens of this type are either heated from a steam plant, or have a water

compartment at the base which can be heated by gas or electricity. There are two main kinds:

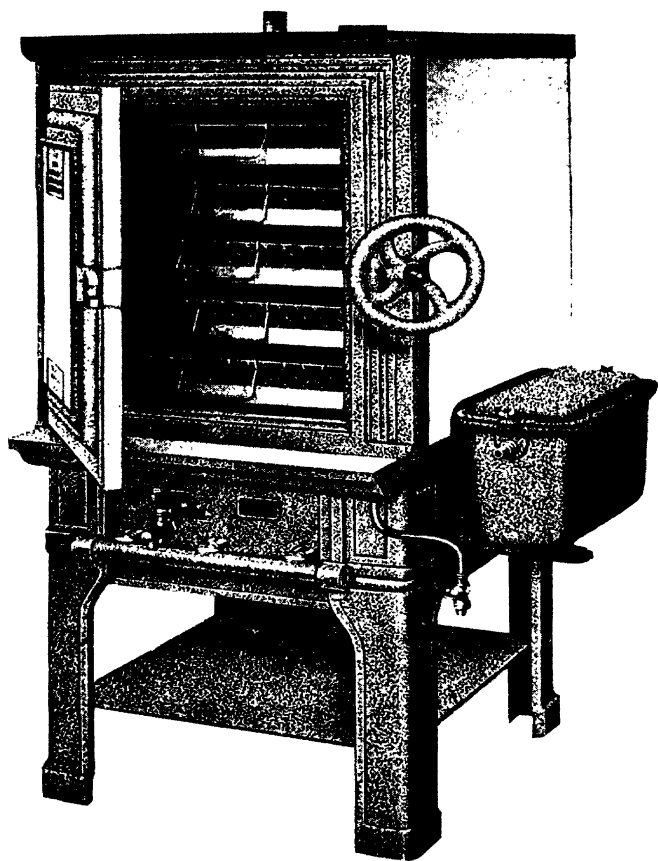
(a) With perforations at the side of the oven through which steam can pass. The trays fitted to this type are of aluminium or tinned steel, into which the puddings, etc., can be put to cook; this is most suitable for hospitals or cafeterias, as the trays of food can be sent direct to the ward or counter.

(b) With perforated trays through which the steam can pass. This is more suitable for schools where food is cooked in moulds and turned out before going to table.

Modern steam ovens are very labour-saving, as they are enamelled outside and therefore easy to clean, while the most up to date have a whistle to indicate when the water in the container gets below a certain level.

A steam oven costs from twenty-five pounds. (See illustration opposite.)

Roasting Ovens. There are many different kinds of these on the market, but one of the best is electrically heated. The elements are enclosed at the side of the oven, the shelves are slatted, and there is a well at the bottom to catch dripping. Joints are placed directly on to the shelves and each joint is basting the one below, so that there is very little need to open the door during cooking. Besides saving labour, fuel can be saved in this



AN UP-TO-DATE STEAM OVEN

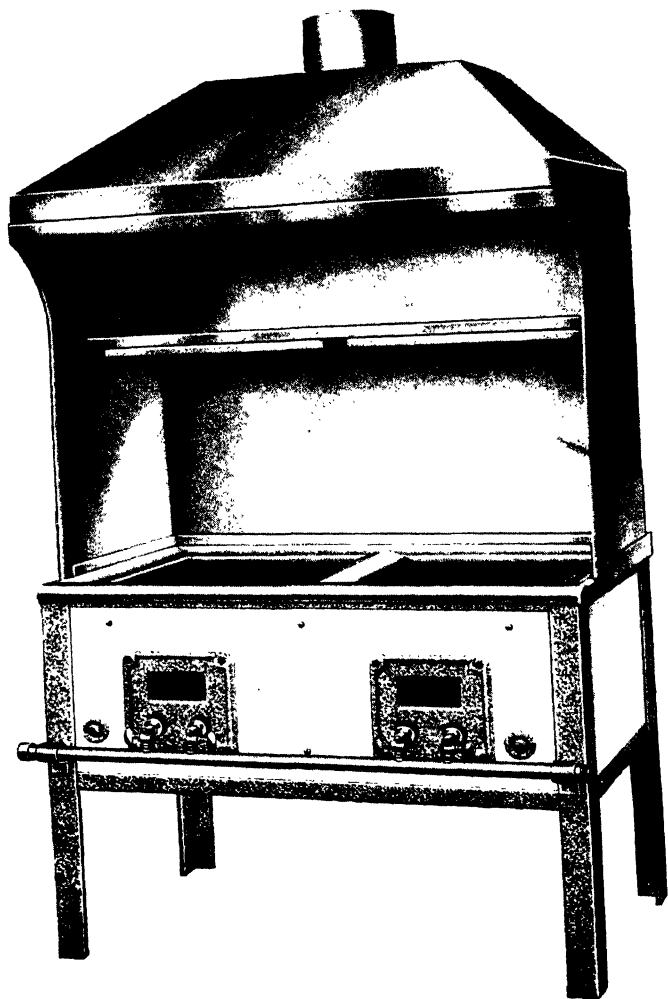
ovens should be raised from the floor, eliminating unnecessary stooping and lifting.

Hoods and Oven Vents. A galvanized-iron hood should be placed above each set of hot plates: this has an outlet pipe either into the open air or into a suction pipe. In this way all fumes from cooking are removed and there is little smell either in the kitchen or in the house. Each oven must also have a pipe leading from it which will remove fumes from the stove in the same way as from the hood.

Fish Fryers. These are only necessary if a large amount of frying has to be done. The fryer can be divided into several compartments so that more than one type of food can be fried at the same time. Food is lifted from the container in a frying basket on to the rack above, where it drains and at the same time keeps hot. A tap at the base allows the fat to be drained off periodically and the container cleaned. A large seamless pan can be substituted for a fryer and the food drained on a wire rack (bought as a foot-scraper from the ironmonger's), standing on a butcher's tray. An illustration of the fryer appears opposite page 12.

HOT CLOSETS

It is essential that food shall be sent to table really hot; where food has to be dished in large quantities some means of keeping this food hot must be provided, and for this a hot closet is best.



A FISH FRYER

The most important hot closet is one which gives direct service to the dining-hall: this can be heated by steam, which is less drying, or by gas or electricity. Ovens form the bottom part of the closet, where dished food can be kept for the short time between dishing and serving, while doors on both sides make for ease of service. The counter top can be in the form of a bain-marie, with a water trough of from six to eight inches, with fitting containers, each to hold a different kind of food. This is most suitable for a cafeteria or an institution where meals are served over a long period.

A simpler type of hot closet has a smooth metal top, preferably of stainless steel, which can be used for the service of some foods such as vegetables which have a cover to the dish and so will not lose heat readily.

Where there is a great deal of carving, and no machine is available, it is advisable to choose a hot closet with a carving well. This is from three to four inches below the level of the counter and prevents meat from becoming cold while it is being carved. A small indentation at one side collects gravy. This carving well can have a fitted lid so that the whole of the counter can be used when there is no carving to be done.

Reserve Heater. Large kitchens will require a reserve hot closet. This can be from five to six feet high and should have doors on both sides to

save unnecessary steps; the reserve heater is often built into the wall which divides the kitchen from the servery. Thus food can be put in one side by the kitchen worker, taken from the other side by the servery worker, and so transferred to the servery hot closet without any unnecessary movements, and little fear of the food cooling in transit.

Bain-marie. There are various types of these on the market, and in some cases they form part of the kitchen reserve heater.

The top portion is a water trough, which is kept at simmering point; saucepans and other vessels are fitted into openings and the contents of these vessels will keep hot without spoiling. A bain-marie is essential for hotels, restaurants, and hospitals where there are a number of small dishes with sauces, etc., to be served, but is less necessary for schools, where the diet for every one is practically the same and the larger quantities of food can be kept hot in boilerettes.

GENERAL KITCHEN APPARATUS

Tables. A work-table seven feet by three feet six inches provides a very useful working surface; it is not advisable to have tables too large, as progress round the kitchen is impeded and the worker has to take too many unnecessary steps. Tables should be fixed to the floor to provide a steady working surface; cupboards and drawers below

should hold all the equipment required for the work at that table, while a knee-hole provides comfortable space for standing or sitting. A shelf eighteen inches above the table, running the whole length, but only half the width, provides additional space for finished work.

Surface of Table. A hard, strong surface is necessary, and one which is easy to clean; stainless steel or enamel are the most up to date and fulfil these conditions, but both are expensive, are somewhat noisy, and enamel is inclined to crack with constant use.

If wood is preferred, one of the harder kinds should be chosen, such as cypress or sycamore, which are light in colour, hard, and free from knots; teak is durable, but is dark in colour and does not give the same clean appearance.

Very much more cleansing is necessary for wood than for either of the other surfaces, as it must be scrubbed daily, while it is sufficient to wash enamel or stainless steel.

White linoleum is sometimes used to cover a wood surface; this is attractive in appearance and easy to keep clean, but the surface has to be renewed from time to time.

Height of Tables. It is important that working tables should be the correct height: from thirty-two to thirty-three inches is the average height; to ascertain this, if uncertain, the worker must be able to stand at the table with the whole of the

hand flat on the table when the arm is quite straight.

Cupboards. Sufficient cupboard space must be allowed to hold all the necessary equipment and daily stores; table space is provided for containers if the top section of the food cupboard is recessed from six to eight inches and additional space if this section is built fifteen inches above the bottom portion as well as being recessed.

To avoid unnecessary cleaning, doors, etc., should be made in one piece, and if finished with a flat stain can be dusted daily and washed occasionally. Where space is limited sliding doors are best, but these are more expensive and dust is inclined to collect in the runners.

Meat Block. There are two types on the market, one in the form of a small table with cupboards below which hold a meat-saw and mincing machine. The top surface is parquet and gives a very hard surface on which meat can be chopped or cut up; as the blocks wear they can be replaced. The second kind is a piece of tree-trunk; any hard wood is suitable, fitted with three legs so that it is quite steady. As the surface of this wears away a layer can be sawn off from the top until it is too short for use.

The former kind can be bought for about five pounds, while the latter costs from thirty shillings according to the kind of wood chosen.

Kitchen Sinks. The material used for these, the

size and number, will depend on the institution. Where a large number of people are being catered for, the kitchen sinks will be used only for kitchen washing-up, and porcelain will be best, as these are easy to keep clean and can be bought in standard sizes.

Smaller institutions will in all probability have some, or all, of the dining-room washing-up done in the kitchen, so that a material which will not cause too many breakages must be chosen for the sinks (see Washing-up Scullery, page 30).

All sinks should have at least three feet of draining-board on each side, and the space below can be fitted with shelves or cupboards to hold cleaning materials.

The position of the sinks will vary according to the purposes for which they are to be used, but they should not be the only means of obtaining water for cooking; a tap on the opposite side of the kitchen will save many unnecessary steps and avoid heavy carrying. The height of a sink is of great importance and should be fixed to suit the average worker, i.e. about thirty - six inches from the ground.

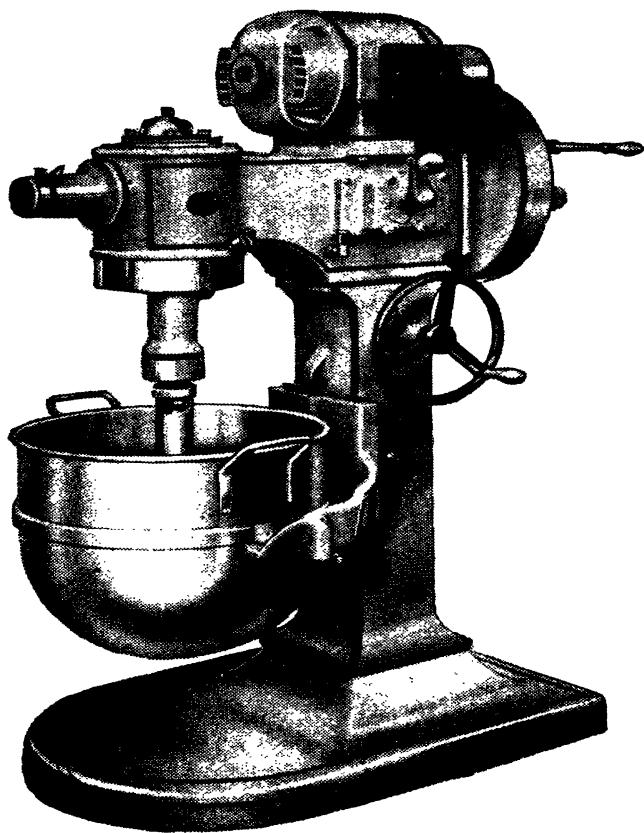
Water Heater. The water which circulates round a building for central heating is not sufficiently hot for kitchen washing-up, but this water can be passed through a thermostatically controlled electric or gas heater and raised to the required temperature, viz. 165° F.

SAUCEPAN STAND

A cook's time should not be wasted by having to take unnecessary steps to fetch pots and pans, therefore the saucepan stand has to be as near the hot plates as possible; in a very large kitchen more than one may be required.

A hard-wearing stand is made of iron and covered with two layers of aluminium paint to prevent rust: the shelves, if slatted, allow a current of air to circulate through the pans when they are inverted and at the same time they are free from dust.

A special row of shelves can be used for lids, or a row of hooks. It is sometimes possible to keep pans on a rack below the hot plates or below ovens which are raised from the ground.



AN ELECTRIC MIXING MACHINE

CHAPTER III

LABOUR-SAVING APPARATUS

Mixers. No piece of apparatus is so labour-saving to the cook herself as an electric mixer; the smaller models, which can be clamped on to a table, have a six- to eight-quart bowl, cost about thirty pounds, and will beat and mix.

The large floor models, costing up to £250, are the equivalent of several pairs of hands, as the numerous attachments will not only mix and beat, but will mince, peel potatoes, chop fat for pastry making, and even make ice-cream, so that one piece of apparatus is doing the work of several. A photograph of an electric mixer is shown opposite.

Potato Machine. This may be in the kitchen but is better in a vegetable scullery. A hand machine to take a six-pound load can be operated in two or three minutes; the inside of the machine is made of a rough-surfaced metal and has a rotatory disk at the base. When the handle is turned the potatoes are thrown against the side of the machine and the skin is rubbed off, the eyes being removed by hand. This machine must be placed by the side of a sink, as a constant supply of water is needed.

An electric machine works on the same principle, but a great deal of time is saved compared to a hand machine.

Besides saving labour these machines are less wasteful; a saving of approximately fifteen per cent over hand peeling is usual.

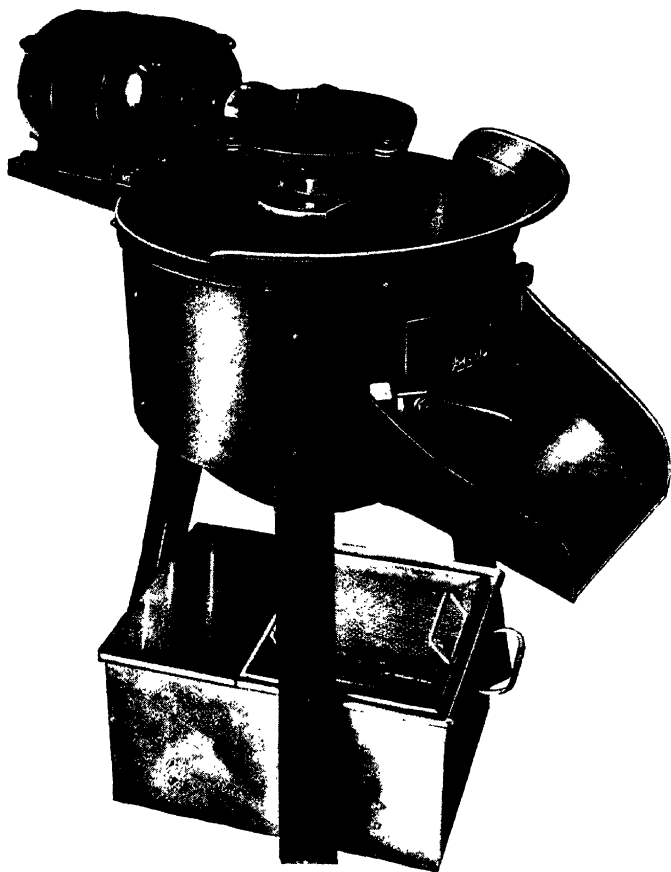
A hand machine of the size described costs from four pounds, and one worked by electricity from twenty pounds. An illustration is shown opposite this page.

Bread Machine. This should be placed near to the toaster and should stand on a table large enough to allow room for buttering if this has to be done before the bread is sent to table. There are several good hand machines on the market costing four or five pounds; it is important to buy one with a good knife and to have this sharpened by the makers at regular intervals. An illustration is shown opposite page 21.

All these machines carry a hand guard which must be in place whenever bread is being cut, otherwise a serious accident may occur.

Bread for sandwiches, etc., can be cut to an even thickness on these machines in less than half the time it would take by hand, and there is no waste.

There is now on the market an electrically driven machine which not only cuts bread but also butters it; the cost of this is prohibitive for the ordinary institution, though very labour-saving where enormous quantities of bread and butter have to



A POTATO PEELER



A BREAD- OR BACON-CUTTING MACHINE

be cut. One machine now in operation does the work of four full-time women.

Carving Machine. A machine for carving meat is usually worked by hand and is somewhat similar to the bacon machine seen in shops; the meat must be boned before cooking, but this can always be done by the butcher. Sufficient meat for a hundred people can be carved by one person on this machine in a little over five minutes, so that the food has no time to spoil, is of uniform thickness, and looks more attractive. One institution, catering for men, has reduced its meat bill by twenty-five per cent since installing a carving machine, and the meat is now carved by one man instead of five as formerly.

It is possible to purchase a machine which will cut bread and carve meat, but it must be remembered that a knife which is used for meat will very quickly become blunt and must be resharpened at frequent intervals.

Butter - pat Machine. A hand - worked model makes about a hundred pats a minute, and butter served in this way looks more attractive and is more economical than when served in large pieces.

There are several good makes on the market, costing from four to six pounds.

Ice-cream Machines. Ice-cream is an inexpensive and very popular sweet but entails too much labour to be made in the old-fashioned hand-churned

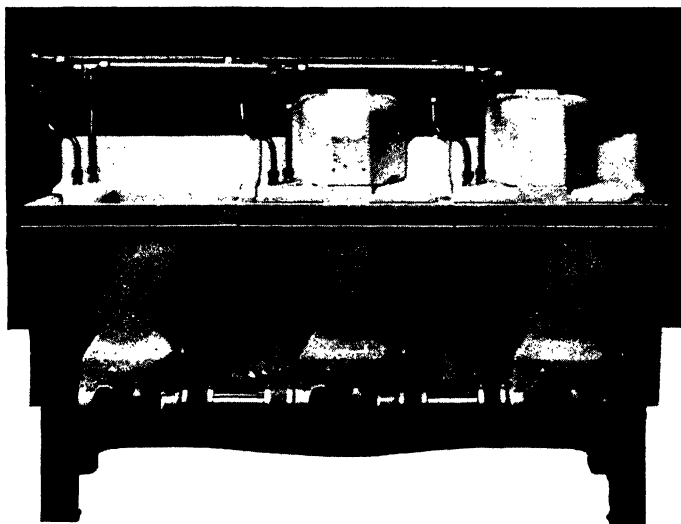
machine. To-day the excellent wood tub can have a small motor attached, or, for very large institutions, there are the new electric ice-cream freezers in the form of a cabinet, with a compartment for churning and additional space for storage.

Washing-up Machines. There are a large variety of these on the market, some in the form of a cabinet, and some built into the sink. Where there are more than a thousand pieces of china to be washed, or where rapid washing-up is required for a continual service of meals, these machines are invaluable. When comparing the time for washing-up in this way and by hand, the time necessary for cleaning the machine must be taken into consideration.

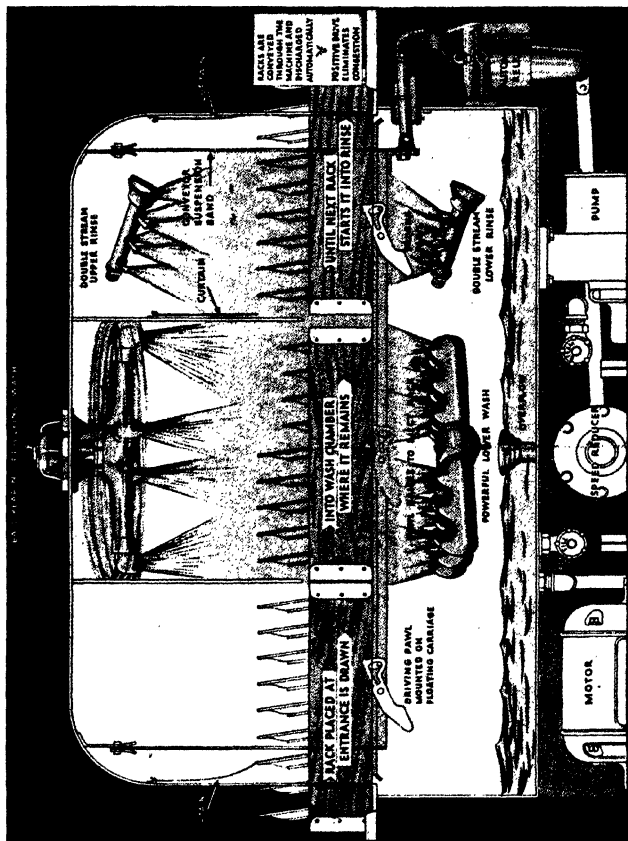
Special baskets for plates, cups, silver, etc., are provided with these machines; one hotel states that the work is now done in less than half the time and only two workers are required whereas formerly five were necessary.

A washing-up machine suitable for an institution catering for approximately a hundred costs from a hundred pounds. One of these is shown opposite this page. In this model there is a powerful impeller in the washing tanks and the dishes are totally immersed in violently surging water which ensures their receiving the full scrubbing force of the water on all parts.

The rinsing or sterilizing tank can be maintained



A THREE-COMPARTMENT MODEL DISH-WASHER



A DISH-WASHER (SPRAY TYPE) IN WORKING SECTION

at boiling-point if desired, and when the baskets are withdrawn from this tank the dishes dry rapidly and thoroughly by their own heat.

The working of another type of machine is shown in the diagrammatic illustration opposite this page. This model is fully automatic and the rack is drawn by the first set of pawls into the wash chamber, where it remains until another rack comes to take its place. The second rack pushes it into the rinse compartment, where the last set of pawls takes it on to the clean-dish table.

Trolleys. A great many unnecessary steps and much heavy lifting are avoided if a trolley is used: goods can be brought from the larder, finished dishes from kitchen to servery, or dishes in the process of being made may be moved from one piece of apparatus to another.

Construction. A strong, hard wood is essential and to save cleaning the shelves can be covered with linoleum. If the floor is perfectly smooth it is not essential to have a ridge round the top, as without this more dishes can be moved at once; where a floor is uneven it is better to have a one-and-a-half-inch rail at the top. The sides of the trolley can be grooved and the shelves movable; this is useful when the height of the dishes varies.

Wheels. A kitchen trolley will have to take heavy weights, so that it is more economical in the end to buy good wheels, with strong ball-bearings and

thick rubber coverings, and able to move freely, as fixed wheels do not turn easily at corners.

Heated Trolleys. Where food has to be carried some distance a heated trolley is best. There are two popular kinds on the market, one which is similar to a hot closet on wheels and is heated by electricity. It can be plugged in in the kitchen and when thoroughly hot the food is put in, taken to its destination, and served at once or again heated there. The second type is known as the 'Hot-Lock,' and is heated by charcoal. It takes very much longer to get hot, but charcoal causes a less drying atmosphere than electricity, so that food in this type of heated trolley does not spoil if it has to be left for any length of time.

Soup Siever. This piece of apparatus can be used for soup, or to mash potatoes, sieve fruit, etc. It works with a rotatory handle and is very much quicker than using a sieve, though the result is not quite so smooth. A medium-sized one, fixed to the floor, costs from four pounds ten shillings.

Tea and Coffee Urn. Water for tea cannot be drawn off from this until it is boiling, and coffee can stand and keep hot without spoiling. It is a great saving to have this in the servery and saves carrying filled pots from the kitchen.

CHAPTER IV

SMALL KITCHEN EQUIPMENT

THE following list is suitable for an institution catering for from a hundred to a hundred and fifty people, with a staff of three in the kitchen. Average prices have been taken as these are only meant as a guide, for it is always advisable to compare both the quality and cost of goods from several stores before purchasing. A good quality should always be chosen, as the equipment in an institutional kitchen gets a great deal of wear, and a poor quality will soon need to be replaced.

Wood

	<i>s.</i>	<i>d.</i>
2 pastry boards (one if monel-metal or enamel top to table)	4	6 each
2 chopping boards	4	0 "
6 wooden spoons—assorted sizes . .	4	½ "
2 14-inch wire sieves	3	6 "
2 14-inch hair sieves	4	6 "
2 pastry brushes	10	0 "
2 fat brushes	1	0 "
1 long-handled soup stirrer	5	0
1 vegetable presser	2	6
4 stools	8	6 each

KITCHEN CUTLERY

	s.	d.	
4 cooks' knives	2	6	each
2 round-end knives	2	0	"
1 palette knife	3	6	
2 vegetable knives	1	0	each
2 vegetable rippers	10		"
1 saw-edge knife	1	6	
3 forks		9	each
4 iron spoons	1	3	"
4 teaspoons		3	"
1 steel	3	6	
1 stainless-knife sharpener	2	6	

CHINA

6 large mixing bowls	3	0	each
(Painted aluminium will last longer but are more expensive, about 5s. 6d. each.)			
12 pudding basins, 1-quart size		9	"
(Painted aluminium, 1s. 9d. each.)			
6 pudding basins, 1½-pint size		7	"
12 pie dishes, 1-quart size	1	3	"
6 pie dishes, 1½-pint size	1	0	"

ENAMEL WARE

6 1-gallon jugs	4	6	each
4 1-quart jugs	2	6	"
4 butchers' trays	4	0	"
6 enamel bowls, assorted sizes, approximately	3	0	"
12 plates		6	"

ALUMINIUM

12 jelly or pudding moulds	1	8	each
6 dozen small moulds	2	0	per doz.
1 set of measures	4	6	
1 graduated measure	2	6	
2 lemon squeezers	1	0	each

TIN WARE

	<i>s.</i>	<i>d.</i>
4 roasting tins with racks—size will depend on oven, approximately 18 by 24 inches	7	6 each
6 large tins for Yorkshire puddings and cakes	3	0 „
8 1½-lb. round tins for cakes and puddings	1	3 „
2 ½-lb. cake tins	1	0 „
1 1-lb. cake tin	1	3
1 3-lb. cake tin	2	3
6 pairs sandwich tins	1	3 per pair
12 flan rings	1	0 each
2 flour dredgers	1	0 „
1 sugar dredger	1	3
4 cake racks	2	3 each
2 racks for draining fried food	2	6 „
1 box plain cutters	3	6
1 box fluted cutters	4	6
2 star vegetable pipes		9 each
2 plain vegetable pipes		6 „
4 cake-icing pipes—assorted shapes		3 „
4 strainers	1	9 „
2 graters	1	6 „

MISCELLANEOUS

1 corkscrew		9
1 apple corer		9
1 parsley chopper	2	6
1 egg slicer	1	9
1 tin opener	1	6
2 wheel whisks	2	6 each
1 flat whisk	1	0
1 fish slice	2	0
1 large frying spoon	2	0
2 pairs scissors	2	6 each
1 hand mincing machine from	5	0
1 cream machine „	7	6
1 bread crumber and nut mill „	6	6
1 meat saw	3	6

CLEANING MATERIAL

	s.	d.
1 long-handled broom (hair)	17	6
1 brush and dust pan	5	6
1 narrow hand brush for bread machine	2	6
2 'mop buckets'	3	6 each
2 mops	1	6 „
2 buckets	2	0 „
2 kneelers	2	6 „
3 scrubbing brushes	1	3 „
2 soap savers	6	„

Saucepans, etc. To ensure good wear, choose pans with a ridged base in either aluminium or mottled enamel; all large pans should have two handles to balance the weight evenly.

	£	s.	d.
1 12-quart pan—ridged aluminium	1	7	6
3 8-quart pans—ridged aluminium	17	6	each
2 6-quart pans—ridged aluminium	14	0	„
2 1-quart pans—ridged aluminium	9	6	„
4 14-inch stewpans	9	6	„
2 20-inch iron frying-pans	6	6	„
2 omelet pans	2	9	„
1 American steamer (more will be required if there is no steam oven)	1	10	0
4 boilerettes—copper base	2	5	0 each
1 8-gallon stock pot	2	10	0
1 6-quart kettle (sufficient if there is a tea and coffee boiler)	8	6	
1 24-inch deep fat pan with rack	1	10	0
1 20-inch fish kettle	15	0	

Additional pans will be required if there are no vegetable boilers, and fewer pans could be allowed

if no choice is given in the menu and the meals are very simple.

SERVING DISHES

	<i>s.</i>	<i>d.</i>
12 fireproof casseroles with lids	5	6 each
12 <i>au gratin</i> dishes	3	3 „
12 10-inch glass dishes	1	9 „
6 8-inch glass dishes	1	6 „
12 14-inch meat dishes.		
12 12-inch meat dishes.		
12 10-inch meat dishes.		
12 large round bowls for soup or salads.		
24 vegetable dishes.		

No price is given for the meat and vegetable dishes as these will in all probability match the dining-room china.

It is essential to have a reserve of china, the amount depending on how often replacements are made; if twice a year it is usual to allow from twenty-five to thirty per cent of the required number in reserve.

This also refers to plates, but a larger reserve is necessary for cups.

CHAPTER V

SCULLERIES—THE REMOVAL OF REFUSE

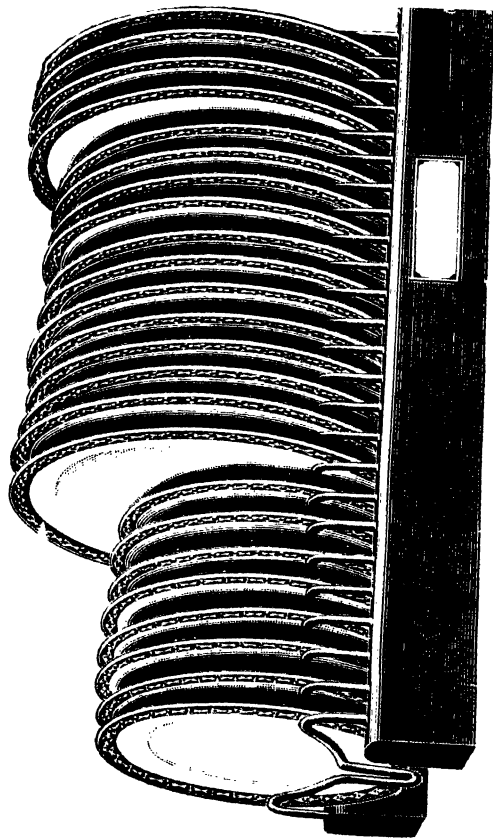
THE number and type of sculleries will depend on the institution, and for no two will the requirements be the same. For a small number of people, one scullery to take all the dirty work, such as vegetable preparation and pan-washing, will be sufficient, but where there are very large numbers a separate room for each kind of work will be less confusing and more labour-saving.

Separate sculleries are described here, but where these have to be amalgamated the same general principles should be followed.

WASHING-UP SCULLERY

The equipment here will vary as in some cases all the dining-room washing-up is brought to one central place, while in others glass and silver are washed separately in a housemaid's pantry. The former is preferable, but space does not always allow this.

Position. This room must be adjacent to the 'returns' hatch or door and close to the storage space for china and silver, so that the work circuits are as short as possible.



A PLATE RACK TO BE USED WHEN WASHING-UP BY HAND

China must be scraped and piled in an orderly manner, and silver and knives sorted separately into boxes.

Sinks. It is an advantage to have two sets, one for china and the other for silver; if this is impossible papier-mâché bowls can be substituted for silver.

The sinks must be sufficiently deep to cover the plate-racks, described later, and have adequate draining space on either side.

Material for Sinks. It is important to choose a material which will, as far as possible, reduce breakages.

Teak. This is good but requires much cleaning to keep it in good condition, and a small quantity of cold water must always be left in the bottom of the sink, or in time there will be a leak. The price of these sinks is not given, as they have to be specially built and an estimate from a builder would be necessary.

Monel Metal or Stainless Steel. This is the newest material for sinks, the surface is not too hard for china, it is very easy to keep clean, but is rather expensive; a double sink costs from twenty-five pounds, according to the size.

Porcelain. Sinks made of this material are easy to clean and are procurable in standard sizes, but the surface is hard and china is very easily chipped unless carefully washed. Where porcelain sinks are already installed it may be found helpful to put

a rubber mat at the bottom, though this must be very carefully washed after use.

Washing-up by Hand. It would be an impossibility to wash up in an institution in the same way as in the home; labour would be wasted both in drying china and in laundering the towels used. Where there is no washing-up machine hand washing and air drying is best, but for this an adequate supply of really hot water is essential if the china is to have the same polished finish as when dried with a tea-towel. Also plate-racks, cup-racks, and knife and silver baskets are necessary; the former can be made by any good carpenter, or bought, with the silver baskets, from a firm dealing with institutional kitchen appliances.

Method of Procedure. Half fill the first sink with hot water to which soap powder or soft soap has been added; the former gives a good lather but the latter is better if the water is hard or the dishes very greasy.

China. Place a pile of scraped plates in the first sink and a rack on the ledge between the sinks. Wash each plate thoroughly, place in the rack, and when full rinse in the second sink. Leave on the draining-board while a second and third rackful is washed; by this time the china in the first rack should be dry and polished. A plate-rack of this type is shown opposite page 30.

Cups are washed in the same way, but a different shaped rack is used; if space permits, cups can be

stored in these racks as they are less likely to break than if piled in a cupboard, and the rack can be carried to the dining-room for table laying.

Silver. An aluminium basket, oblong in shape and two inches deep, with handles at both ends, can be bought for rinsing silver. A polivit plate in the bottom of the basket will help to remove stains, especially when silver has been used for eggs or cabbage.

Silver cannot be successfully air-dried; but a pad of material, such as floor-cloths, machined together, will absorb surplus moisture and limit the number of tea-towels required. Sort forks and spoons. Wash each piece of silver separately and place in the basket resting on the ledge between the two sinks; rinse, turn out on to the absorbent pad, and dry while hot.

Knives. These are treated in the same way as silver, but a cylindrical shaped basket is used in order to keep the handles out of the water.

Glass. It is impossible to air-dry glass in the same way as china; each piece must be washed and rinsed separately and dried at once in order to get a good polish. Teapots, bowls, etc., must be treated in the same way as glass.

Washing - up Machine (see Chapter III). This should be placed close to the sorted china to avoid unnecessary carrying, and the washed dishes should be as close to the china cupboards as possible.

The number of people required to work a machine will depend on the type and whether the china is required again for immediate use; a minimum of two is usually essential.

VEGETABLE SCULLERY

A certain amount of soil always clings to vegetables, and this contains bacteria, so that it is better for all vegetable preparation to be done away from any other food. The vegetable boilers are sometimes placed in this scullery in preference to the kitchen; it may mean that the dished food will have to be taken some distance to the dining-room, but a more pleasant atmosphere results in the kitchen without the steam from these boilers.

Sinks. Deep porcelain sinks are best; one for potatoes must have a draining-board attached for the potato machine; the other, for green vegetables, should have a zinc-topped table adjacent to it: this provides a hard surface and one which is easily cleaned.

For very large quantities of vegetables, tanks are substituted for sinks; these should be on wheels, so that the prepared vegetables can be moved to the cooking apparatus without any heavy carrying.

PAN SCULLERY

For the majority of institutions this is not a separate room but is combined with the vegetable scullery. There must be one or more deep sinks sufficiently large to take the biggest piece of hand apparatus. The sink must be strong and of a material which will not be easily chipped by pans; a wood sink, zinc-lined, is good, though the lining will have to be renewed from time to time.

Sometimes, through lack of space in the kitchen, pans are stored in the pan scullery: this is not ideal as the cook will have to take many unnecessary steps to fetch the pans, but this room provides excellent storage space for the larger pieces of apparatus, such as steamers and boilerettes, which take up a great deal of space and are not in frequent use.

THE REMOVAL OF REFUSE

Kitchen refuse can be divided into three groups: food trimmings which should be sold for pig wash, rubbish to be burnt, and tins. As the greater amount of refuse comes from vegetables, the scullery, rather than the kitchen, is often the place for its removal.

Each kind of refuse must be kept separately and removed as speedily as possible by one of the following methods.

1. *Penthouse*. This is a small shed built on to the outside of the scullery or kitchen wall, usually of the same material as the outside walls of the building, and whitewashed inside; it has a well-fitting lid and a door which is kept locked.

There must be sufficient room inside for a row of bins; these are connected to the kitchen by chutes passing through the wall at an angle of forty-five degrees. The opening into the kitchen has a door which prevents smells from penetrating, and the opposite end passes through an opening in the lid of the bin, so that rubbish falls into the right place and again smells are prevented from rising into the kitchen or scullery. Each type of refuse should have a separate chute and several bins; as one container becomes full an empty one is moved into its place, over the mouth of the chute. This is done from the outside door, which also provides easy access for emptying and cleaning.

2. *Floor Chute*. This is similar to the chute for a penthouse but is underneath the kitchen, often in the boiler house. The floor covering moves easily with the foot and the lower end of the chute passes below the lid of the trough, through an opening. At least two containers are necessary and these should be on wheels as the rubbish can be more quickly removed in this way.

3. *Bins*. Where it is not possible to have either a penthouse or a floor chute, bins must be used; these can be bought with a foot-pedal and a

movable container. In this way a load of rubbish requiring two hands to carry it can be emptied by one person; also when emptying it is easier to remove the inside portion rather than the whole bin.

Cleaning Chutes and Bins. It is essential that this should be done frequently and be well supervised. Chutes must be cleaned twice daily with hot water containing soft soap, and rinsed with hot water in which there is some disinfectant. Where food is sold for pig wash the disinfectant must only be used at night and the chute well rinsed with plain hot water next morning. A long-handled broom kept specially for the purpose prevents any particles from adhering to the sides. All bins should be emptied frequently, and those for food scraps washed in the same way as the chutes; those for tins need not be washed as frequently, but no refuse must be allowed to accumulate.

CHAPTER VI

LARDERS AND COLD STORAGE ROOMS

A LARDER is a room where fresh goods can wait until needed by the kitchen, and 'left-overs' or partially prepared dishes be kept between one meal and the next. In order to keep these foods fresh the room must be cool; it is better on a north wall, and it must be airy, though the window should be covered with fine gauze to keep out insects. Many larder windows are of yellow-tinted glass, as flies are said to dislike this colour. Tradesmen should not be allowed to enter this room as they will bring dust and micro-organisms on their clothes and boots; a hatch from a corridor into the larder provides an entry for goods.

GENERAL LARDER

This should be fitted with shelves, preferably of slate or some similar cold substance; where space is adequate two shelves are best as it is difficult to reach to a greater height. Where there are two shelves these should be two feet apart, but if three are necessary they must not be more than twenty-one inches apart or the top one will be inaccessible.

Refrigerator. If food is bought in bulk and has to be kept from one day to the next a refrigerator is essential; this provides a means of serving food really cold and, if sufficiently large, ice to cool drinking water in the summer months.

There are many types of refrigerators on the market, worked by gas, by electricity, or, for the country, by oil. When choosing this piece of apparatus compare the cubic capacity of storage space and the consumption of fuel. If big demands are to be made on the machine the thermostat can be lowered; more fuel will be used but there is less chance of the refrigerator not fulfilling its purpose.

MILK LARDER

Milk should be kept in a room separate from other foods. The room must be cool and airy, the windows protected in the same way as the general larder, shelves should be made of slate, and if possible there should be a 'cold pipe' circulating round the room to keep the temperature at a constant low level.

A hatch provides a means of entry for the milk and prevents dust being carried in on the man's boots and clothing.

Large, wide-necked vessels are best for milk which is not for drinking; there are some special milk-buckets to be bought to-day which have a

perforated lid, which is better than a muslin cover as it will be washed daily with the bucket, and there is no fear of the milk not being covered. Certified, or other legally graded milk, which is sent in a bottle or carton, is best left in its own container in the milk larder or refrigerator.

Other dairy produce may be kept in this larder—eggs, butter, etc.—and when this is done the butter machine must be as near to the butter as possible.

BREAD AND CAKE LARDER

In a small institution this will be part of the general larder, but the conditions are the same. Both bread and cakes become dry if exposed to the air, and the earthenware crock which is so common in households would be too small to hold the large amount of bread required.

For bread a cupboard is best, with slatted shelves which are sufficiently deep to take the loaves lengthways—about two feet—and with enough space to take two or three days' supplies. New bread is placed on the top shelf or shelves, and as the loaves become stale they are moved to a lower shelf; each day the bottom shelf will have been emptied; this is wiped and the bread from the one above lifted down. This is repeated until all the loaves have been moved and all the shelves wiped, leaving space at the top for the fresh supply.

Cakes are best kept in a cupboard similar to the one described for bread, but the sides should be grooved and the shelves movable so that the distance between can vary according to the kind of cake. For small cakes the shelf should be in the form of a tray with an inch ledge all round to prevent the cakes from slipping off.

Biscuit tins can be used for small quantities of cakes; if these are placed on their sides it is easy to lift the lid without taking down the tin.

VEGETABLE LARDER

Vegetables must be kept quite separate as the bacteria in soil would harm any food with which it came in contact. Few institutions store vegetables in any great quantity, but roots and tubers are cheaper bought in bulk and will keep for several weeks if kept in the right kind of containers.

Potato Bins. Potatoes should be kept in bins; these can be of wood if standing on a stone floor, but where there is a wood floor a zinc lining is essential. A lid at the top makes an adequate entry for a large supply of potatoes, and if covered with zinc provides a useful table surface, while vegetables are easily removed through a trap-door at the base; by this method the old supply of potatoes is always used before the fresh consignment is started.

Vegetable Racks. There are two types of racks;

one is made of wood, built on to the wall, and is divided into a number of compartments. The front of each compartment is divided into three sections, each of which can be lifted out separately, so that as the quantity in the bin decreases it is easy to reach the bottom layer. Alternatively, a trap-door could be placed at the bottom of these racks and the vegetables drawn off from here as required, but the rack is more difficult to clean if made with a trap than with the front in separate sections.

Wire-mesh baskets can be bought as vegetable racks, but hold less and are not so durable as those made of wood.

Fruit is generally used as soon as it is bought, but for lemons and other fruit which is always kept in reserve a rack of slatted shelves, built on to the wall at an angle of forty-five degrees, will provide good keeping space.

COLD STORAGE ROOMS

An institution which is sufficiently large to buy direct from a wholesale market, or one which is a long way from shops, will require good cold storage accommodation for meat and fish. It is better for each type of food to be kept separately so that several large cupboards or small rooms with cold pipes circulating round are most successful; in this way the door is opened less frequently, foods with

a strong smell will not affect other stores, and each room can be kept at the temperature best for the particular food stored there. A cold store for meat has strong hooks suspended from the ceiling; poultry is kept on a shelf or hung from the roof, and fish is left in tubs or sinks.

CHAPTER VII

STOREROOMS

THE number and size of the storerooms will depend on whether the goods are bought in very large quantities. This is usually a cheaper method of purchasing provisions and is especially necessary when the institution is some distance from shops or a railway station. Before determining the size, make a list of all stores required by the kitchen, i.e. food stores, cleaning material, reserves of china, etc., and decide in what quantities these will be purchased and what type of containers will be used.

Arrangement. Each kind of stores should be kept in a separate room, so that the distribution can be at different times and strong smells from cleaning materials and dust from china will not affect foods. Storerooms must be light, airy, and cool, the latter being particularly necessary for a jam or tinned-food store, adequately lined with cupboards and with a wood or tiled floor. Washable paint is all that is necessary for the small amount of wall space which is not covered by cupboards.

Cupboards. In a room from eight to ten feet high these can stretch from floor to ceiling, the top

section being reserved for articles which are very little used. In a very high room this is unpractical. Here the cupboard can be from eight to ten feet high with the top sloping downwards so that there is no ledge to act as a dust trap.

Cupboards should line the walls, thus providing more storage space in a long, narrow room, though a large square room can be used to full advantage if a row of cupboards is placed down the centre; these must not stretch to the ceiling unless there is a window in both divisions, and if of table height will provide a useful table surface during the distribution of stores.

Dimensions of Cupboards. This will depend on containers, but a useful size is as follows:

Lower section thirty-three inches high, two feet deep.

Upper section fifteen inches above lower portion and recessed from six to eight inches.

In this way a table surface is provided by each cupboard, which is a great advantage when lifting out containers, and no floor space is wasted by a table in the centre. The top cupboards, though narrower, will be better for small articles, as these can so easily be mislaid at the back of a deep cupboard, and larger stores can be put into the lower cupboards.

A great deal of cleaning will be saved if the shelves are covered with linoleum.

DRY FOOD STOREROOM

Containers. For very large quantities, built-in bins with a movable lid, and a lining of either zinc or galvanized iron which can be lifted out for cleaning, are best. Some of these bins are built on the same principle as the potato bins described in an earlier chapter, that is, with a trap-door at the base from which the commodity can be taken as required; others are made to tilt so that the bottom layer is not difficult to reach. Bins of this type holding up to five hundredweight are found in hospitals and large hotels. For rather smaller quantities, holding about one hundredweight, there are enamel or galvanized-iron bins, the newest having a hinged lid, and some a foot-pedal, though the ordinary dustbin is less expensive and will serve the same purpose.

Biscuit tins, painted to prevent them from rusting, will hold up to seven pounds of a commodity, while smaller quantities, especially of foods which do not keep well, can be stored in glass jars; these must have a well-fitting lid. One of the best on the market has a pad attached to the lid which absorbs any moisture, and can be renewed as required. Jam-jars are useful containers for small quantities of material, especially if covered with a bakelite lid.

Arrangement of Stores. Each cupboard should contain things of a similar nature so arranged that

no one article is hidden from view; rows from front to back are best, so that the contents of the cupboard can be seen at a glance.

A list of the ingredients in each cupboard is pinned to the outside; a careful storekeeper will, of course, know where everything is kept, but it is wiser to prepare for emergencies when someone new to the post has to substitute.

All containers must be clearly labelled. Paint is best, as this will not wash off, and the weight of the empty bin or jar should be shown on the outside; this simplifies checking as the contents need not be lifted out, which is wasteful, possibly inaccurate, and entails a great waste of time.

Equipment required :

Scales. A large floor model to take bins and weigh up to four hundredweight. A table model to weigh up to fourteen pounds, with a scoop-shaped pan.

Step-ladder. The collapsible type is adequate unless cupboards are very high.

Funnels. Large and small.

Writing material.

Enamel trays and basins.

Knife, spoon, scissors, etc.

Measures.

Corkscrew, hammer, screwdriver.

Brush and dustpan, broom, refuse bin.

Foods which can be bought in bulk and stored :

Cereals. Buy according to amount used; rice and similar grains keep well, but those containing fat, such as barley and oatmeal, will not keep for any length of time.

Pulses. } Keep well if stored in an air-tight or
Tea. } lead-lined container.

Dried Fruit. Store moderately well; if bought in any bulk should be turned out and looked over occasionally.

Spices and Essences. Lose flavour when opened, therefore buy in small quantities and keep tightly corked.

Herbs. These can be bought quite cheaply in the summer, and if dried and sieved and kept in an air-tight container will keep all through the winter.

Sugar. Can be stored easily.

Coffee. Should not be stored at all, but freshly bought as required.

Tinned Foods. Buy economically and not in too large quantities; use immediately when opened.

CLEANING MATERIAL STORE

Cleaning material is much cheaper if bought in bulk; it does not spoil with keeping and some, e.g. soap, should be kept for several months before it is used.

Cupboard shelves must be very strong to take the weight of heavy packages, but in most other essentials it is similar to the food store.

JAM STORE

The conditions in this room must fulfil the essentials for keeping jam for any length of time, i.e. the store must be dry and cool. As most jam is in seven-pound jars the shelves should be sufficiently deep to take two jars, with just enough clearance between the shelves to be able to remove the jars easily. These cupboards must not be too big or the shelves will not be able to bear the weight—six jars on a shelf is sufficient.

Tinned foods are often stored in this room, as the conditions for keeping jam are also suitable for all tinned goods.

RESERVE CHINA, ETC.

The amount of this will depend on how often the kitchen is allowed to replace breakages.

China must not be stored in big piles, particularly if it is a heavy variety, or the bottom pieces may crack from the weight of the ones above.

Although not ideal, where space is limited and the rooms are high kitchen reserves may be kept in the top cupboards of one of the other store-rooms.

KITCHEN LINEN

In most institutions this will be kept with the house linen, but in hotels and hospitals the kitchen linen is often in a small linen room, forming part of the kitchen premises.

The room should be warm and dry, with slatted shelves divided to allow space for each type of article.

RECEIVING AND ISSUING STORES

Receiving. Goods must be checked on arrival with the duplicate order and invoice, inspected for quality and weighed and counted; when accepted as correct, the stores should be taken by the tradesman to the storeroom or larder hatch, unless there is a man on the premises, as no maid should be asked to carry very heavy weights.

The storekeeper is responsible for putting the goods into their container and, in the case of fresh commodities, issuing them at once to the kitchen.

Issuing. Dry goods are usually issued daily and cleaning material, china, etc., weekly.

It is essential to have a special time for giving out stores and a different time for each type of stores; only in an emergency should the storeroom be opened at any other time, and then only by an authorized person.

Where several departments are sending to one

storeroom it is better to have printed lists issued so that the storekeeper can see at a glance if each department is requiring the same commodity.

The containers from the different departments should bear a distinguishing mark; coloured paint is excellent for this.

Replacements of cleaning utensils such as floor-cloths, or of china, must only be made when the worn-out or broken article is produced, as much more care is then taken not to mislay things and it is easy to see who is washing up carelessly if the broken pieces have to be shown.

CHAPTER VIII

SERVERY—HOUSEKEEPER'S ROOM—CHECKING OFFICE

SERVERY

THIS room enables meals to be served more pleasantly, as it cuts off all kitchen smells and noise from the dining-room and the work of the kitchen can proceed during a meal without the rest of the establishment being aware of the fact.

It is the connecting-link between the kitchen and dining-room and should contain space for all dining-room china, etc., available for table laying, and be at the end of the washing-up circuit so that piles of clean china and silver are carried as short a distance as possible.

Counter. For good, quick service this should be the full length of the servery, roughly twenty feet where the dining-room seats two hundred people, though ten feet would be insufficient for a hundred people.

If food is to be served really hot part of the counter must be heated, while a refrigerator in the cold counter ensures that all cold dishes reach the table at the correct temperature.

A steam-heated counter is the least drying for

food, though gas and electricity provide good substitutes.

If all the residents are served at one meal it is sufficient for the space below the counter to be in the form of an oven where food can be kept hot for the short space of time between dishing and serving; if the meal is extended over a long period, a counter with a bain-marie top should be provided.

A good surface for the counter top is stainless steel as this will need very little cleaning; the hot counter should have doors on both sides so that dishes can be put in by the kitchen staff and taken out as required by the house.

It is usual for the hot section to occupy at least half the length of the counter, the remainder is for cold foods, for 'returns,' i.e. dirty plates and dishes, and possibly for a tea and coffee boiler. The arrangement of these sections must depend on the position of the washing-up scullery, and the entrance from the kitchen of dished food. The counter can be shut off from the dining-room, except during the service of meals, by frosted glass windows, or less expensively, but less attractively, by slatted wooden shutters.

The space below the returns counter and below the cold counter, if there is no refrigerator, can be used for cupboards, again with doors on both sides, to hold small articles which may be required during the service of a meal, sugar basins, additional cutlery, etc., or, where space is limited,

shelves above and below the cold counter allow additional space for dished food.

Returns Counter. Sufficient space must be allowed for the requisite number of workers to 'stack' during the meal; for quick service two are best, hence a space of from four to five feet is necessary.

All plates and dishes are scraped, knives and silver sorted and put into boxes, and glass on trays, to prevent any delay in the washing-up department.

There is a trolley with fitted boxes and trays which can be taken round the room after the meal to collect everything left on the tables, and this can be taken straight to the kitchen; washed glasses and silver can be put straight back on to this piece of apparatus and taken to the servery.

There must be a connection between the servery and the dining-room, either by a door or a hinged flap in the counter which can be used as counter space during the service of the meal.

The wall space of the servery should be lined with cupboards to hold all the dining-room equipment: heavy articles, such as plates and dishes, on the lower shelves, with lighter ones above and those less frequently in use right at the top.

Trays the size of the cupboard shelves for cruets and tumblers are most labour-saving as the trays can be carried into the dining-room when laying tables and washed glass can be placed on the trays in the washing-up scullery and carried or taken by

trolley straight back to the servery. Boxes for knives and silver can be used in the same way. If space is limited, the top set of cupboards can be recessed to provide additional surface for dished food.

HOUSEKEEPER'S ROOM

One room in the kitchen premises must be set apart for the use of the housekeeper and possibly the cook, where orders can be written, menus planned and discussed, and orders issued to maids.

Quite a small room is suitable if it is to be used solely for this purpose, with a knee-hole desk and a set of cupboards.

CHECKING OFFICE

This may be incorporated in the housekeeper's room, though a separate office for each purpose is better; if it is to be used only for receiving and checking goods it can be quite small, containing only a table and two sets of scales, a floor model for large packages and a table model for smaller articles.

This room should be just inside the tradesmen's entrance, and all material should be brought here where the responsible person can check the goods with the order form and invoice, and inspect them for quality and correct weight or measure. When

accepted as correct these goods can be dispatched to the larder or storeroom.

If a member of the kitchen staff is responsible for checking stores, a bell must connect the checking office with the kitchen, while if there is a housekeeper or storekeeper the bell must ring in her room.

CHAPTER IX

PURCHASING KITCHEN STORES—HOUSEKEEPER'S BOOKS—COSTING

METHODS OF BUYING FOR THE INSTITUTION

AN institution requires goods in large quantities, so that the shopkeeper has not to make up innumerable packages or to deliver them to all parts of the neighbourhood, and is therefore able to supply commodities in bulk at a cheaper rate.

The method of buying which is used will depend on the area in which the institution is situated, the storage space, and the quantity of each kind of foodstuff required.

The possible methods of buying are discussed here and the housekeeper will have to ascertain which will be best for her particular institution, but in almost every case more than one of these methods will be necessary, and often all of them are used for one article or another.

Wholesale. This consists of buying goods direct from the manufacturers or wholesale markets such as Smithfield or Covent Garden. Only large quantities of material can be bought in this way—whole cases of one commodity, carcasses of meat, etc.

It is the cheapest method of buying, but it is well to remember that carriage has to be paid

unless the institution is sufficiently large to warrant a lorry to collect these purchases, as is often the case with big hospitals and hotels.

If meat is bought in the wholesale market there must be good cold-storage accommodation and a butcher to cut up the sides of meat; the institution must also be sure that all the different 'cuts' of meat can be used to good advantage.

Wholesale Merchants. These merchants buy from wholesale firms and re-sell to institutions at a slightly increased cost. They will often sell in smaller quantities than the wholesaler, will deliver the goods, and the bookkeeping is very much reduced, as a large number of articles will be delivered by the same firm.

The kitchen which is catering for small numbers will find this an excellent way of buying dry and tinned goods and cleaning materials, and if delivery is frequent fats, bacon, etc., can be bought by this method.

Purchase by Contract. A contract is an agreement between the store and the institution to purchase a given quantity of a commodity in a given period.

When first wishing to make contracts the institution should advertise in the local paper, giving a list of articles required to be purchased in this way and the quantity, and asking for tenders to be submitted, with samples.

The samples and prices sent must be compared

and an agreement drawn up and signed by the merchant and a representative of the institution, stating fully the terms of the contract. The samples submitted should be kept to compare the quality of the goods supplied.

No contract should be made for too long a period, as prices fluctuate; three months is a good time for dried goods, but a shorter period is better for fresh foods.

Flour, bread, meat, milk, tea, coffee, dried goods, and jam can all be bought by this method; but it is only suitable for eggs, fish, fruit, and vegetables if, as stated previously, the contract is for a very short period.

Percentage Discount. Small institutions which have little storage space can often come to an arrangement with local shopkeepers to have a special discount allowed on the bills.

This is also a good method of purchasing fresh goods for the larger institution; eggs, meat, fish, fruit, and vegetables can all be bought in this way, and though not so cheap as by contract, or from a wholesale merchant, daily delivery is ensured and a larger variety in the menu.

Market Gardens, Stalls, and Markets. Some institutions will be in the neighbourhood of market gardens and can buy direct from the grower. Fruit and vegetables bought in this way are very much nicer, though cartage may have to be arranged.

Local markets and stalls sometimes have a large consignment of foodstuff at a very low price, such as fruit for jam, mushrooms, etc. This is an economical way of buying if the commodity is one which can be washed, as these goods have been exposed to dust and dirt.

Retail. A certain number of goods will only be required in small quantities and cannot therefore be obtained at a special price. These should be purchased from one shop, preferably one which is already supplying some goods by contract; in this way the institution establishes a good contact with the shopkeeper, who will usually do his utmost in an emergency.

An institution must, of course, buy to its best advantage, but where possible goods should be purchased locally.

HOUSEKEEPER'S BOOKS

Order-form Books. These should be numbered and printed with the name and address of the institution, interleaved with a plain sheet so that all orders are written in duplicate; the top sheet, which is sent to the tradesman, should be perforated on the inside edge to enable it to be easily removed.

A separate order-form book is kept for each tradesman, if orders are frequent, with his name clearly written on the outside; one labelled

'various' can be used for firms which are only dealt with occasionally.

Invoices. An invoice must accompany all goods, and this is checked with the duplicate order and goods on arrival; if correct it is filed.

Weekly or Monthly Accounts. Each tradesman is responsible for sending a complete statement of the commodities purchased from him during a given period, either weekly or monthly. This is checked with the invoices, and if the arithmetic is correct is initialled and sent forward for payment.

The duplicate order form should show that this order is complete and the bill ready for payment, either by tearing off the corner, stamping it with the date, or drawing a line through.

Monthly Statement. The totals of all the bills from each tradesman should be entered in a book, ruled for this purpose; it is easier to enter these in groups, such as food, cleaning material, replacements, new equipment, fuel, etc., and each group must be in alphabetical order. A separate total is made for each group and a total for the whole expenditure of the kitchen.

<i>Wages Sheets.</i>	} For details of these books see
<i>Petty Cash.</i>	
<i>Postage.</i>	
	Chapter XIII.

Address Book. The addresses of all employees and temporary workers should be kept, also all firms with which the institution deals.

INVENTORIES

It is important that an inventory be kept of all the kitchen equipment; each type should be kept in a separate book, i.e. one for linen, one for china, etc.

The books should be ruled to show the number in stock at a given time, when purchased, the firm, and price. At regular intervals the equipment has to be checked and a note should be made of missing and damaged articles. Replacements must be shown, stating firm and price.

COSTING

It is usual for a definite sum per head per week to be allotted for food and a separate quarterly or yearly sum for fuel and cleaning material.

In order to provide the best diet within the allotted sum, it is essential to keep a very careful check on the expenditure, and this is only possible if done at frequent intervals, preferably weekly. Where goods are bought in large quantities, the weekly books will not be a sufficient check, as the stock in hand would not show, and this may be very considerable at the beginning of a term or quarter.

WEEK ENDING:					
.....	Cost	Unit	Stock in hand beginning week	Value of stock in hand at beginning of week £ s. d.	Stock received during M T W T F

Some system of showing the goods issued from the storeroom is necessary; this involves a certain amount of work, but is very accurate and can be used to calculate calories, as will be shown later.

Two methods are shown here. The first is the more accurate and is better for schools, etc., where it is important to keep within a fixed margin; the second is quicker and quite successful for hotels and hospitals as a means of showing, at any time, the value of the stock in hand.

Method 1. Make a list of all foodstuffs used in the kitchen; divide these into groups, e.g. vegetables, tinned fruit, essences, and arrange each group in alphabetical order.

Prepare loose sheets with column-heads as below.

The number of pages required will depend on the variety of ingredients used in the kitchen, but the last page is different; this must show the totals of the preceding pages, together with the totals of the tradesmen's books.

The total of the weekly books less the stock in hand should come to the same as the total of goods issued to the kitchen.

This last total, that is, the issued goods, divided

Value of stock received during week	Total value of stock		Stock issued during week								Value of stock issued during week	Stock carried forward	Value of stock carried forward
s. d.	£	s. d.	M	T	W	T	F	S	Total	£	s. d.	£	s. d.

COMMODITY

DATE									INVENTORY	
DATE REC'D	FIRM	BRAND	NO. IN CASE	NO. REC'D	DATE	ISSUED	RATE	COST	TOTAL IN HAND	VALUE

by the number of residents and staff, gives the cost per head per week.

Much time can be saved if this system is used for dry goods only; fresh foods are given out and used at once, so that the weekly totals from the tradesmen's books for these articles should be sufficient for costing, but if calories are to be calculated from these sheets it is important to know in detail each item of food used.

Method 2—Card Index System. Prepare a card for each ingredient as above.

The advantage of this system is that an entry has only to be made when any of the commodity is bought or issued to the kitchen; the card of an ingredient which is seldom used may remain untouched for weeks, but the amount in hand and the value can be ascertained at once. The total value of the stock in hand in the storeroom can only be found by adding the totals of all the cards.

CHAPTER X

CLEANING THE KITCHEN PREMISES

THE KITCHEN

DAILY CLEAN

The Floor. Anything spilt on to the floor must be taken up at once and the floor swept at the end of every session. At regular intervals the floor must be washed, depending on the flooring used; tiles need to be washed daily, but asphalt and cement compositions and many of the cork preparations do not need to be washed as frequently, unless anything greasy has been dropped. The method of washing will depend on the size of the room; a small floor can be washed by hand; this is the least labour-saving method but the result is good. A larger floor can be washed with a large floor-scrubber; this avoids stooping, but care must be taken to see that the surface is not slippery when dry. Very big floors with central drains are hosed well and the water swept to these drains with a stiff broom; it is usual for this work to be done by a man.

Tables. These must be left absolutely clean at the end of each session of cooking; it is sufficient to wash enamel, stainless steel, or linoleum, but wood must be scrubbed at least once a day.

Stoves. If these are wiped immediately after use, while the metal is still hot, it is easy to keep them clean and in good condition. Enamelled stoves require very little attention outside; steel must be rubbed with wire-wool and marks can be removed with a cut lemon.

Cupboards and Drawers. It is essential, if the kitchen is to work smoothly, that everything be put back into its correct place. If all the workers are careful to do this and to wipe up anything which may be spilt, there should be very little to do to the cupboards and drawers each day.

Sinks. At the end of each batch of washing-up the sinks must be left quite clean, and at the end of each session all sinks must be thoroughly cleaned, and wooden sinks scrubbed and left with clean cold water in them. In order to keep traps and pipes free from grease, some hot water in which a little soda is dissolved should be poured down the sink at the end of the day; this must be followed by cold water.

Drains. If plenty of hot water is used for washing up and the plates and dishes are well scraped, there should be no difficulty in keeping the kitchen drains in good order; any particles of food which may have got through must be removed and the drain scrubbed. From time to time the grease trap must be taken out and thoroughly cleaned.

Apparatus. All apparatus has to be washed

after use, and if likely to rust, dried before being replaced.

WEEKLY CLEAN

Floor. A composition floor must be scrubbed at least once a week and a large floor which is hosed daily should be sprayed with liquid soap, well swept with a stiff broom, and then hosed and swept with clean water.

Tables. Stainless steel, enamel, or linoleum table tops will require very little additional attention, but wood should be well scrubbed, using a good scouring mixture; table legs, cupboard fronts, etc., are washed, or wiped if the surface has been treated with a flat stain.

Stoves. It is necessary to weekly-clean these when they will not be required for some hours, and to start the cleaning at night is often best. Cover the inside of the stove with a layer of 'Kleen-off' and leave for some hours, wash well, and all burnt particles and grease will be removed. Wash the outside, or use steel-wool if steel; polish any metal taps or fittings, unless stainless steel; and clean all outlet taps and pipes—a bottle-brush is best for this.

The local gas or electricity company will usually supply free service for all apparatus using their fuel, the only cost to the institution being for the replacement of worn-out parts. All institutions

should avail themselves of this service to ensure that apparatus is working to its best capacity.

Cupboards and Drawers. If lined with linoleum it will be sufficient to wipe these with a cloth wrung out in very hot water, unless anything has been spilt leaving a greasy or sticky mark, in which case the drawer or cupboard shelf must be scrubbed. Jars and tins must be wiped, and it is advisable to weekly-clean cupboards when containers are sent to be filled, as a store list can be made at the same time.

Drains. As special attention is paid to these daily the weekly cleaning is small; disinfectant may be used if required.

Apparatus. If all apparatus is thoroughly cleaned after use there should be very little weekly cleaning necessary, especially if mixers and similar apparatus are 'serviced' by the maker periodically.

Walls, Windows, etc. Walls will be dirtiest round stoves and sinks; this part should be washed each week, the remainder can be swept and washed as required. Windows must be cleaned regularly; this is particularly necessary where vita-glass is used, as the sun's rays cannot pass through dirt on the glass.

SPECIAL CLEANING

An institution with good holidays will find this quite easy as the special cleaning can be done while the building is empty. A hospital, where the

kitchen must work at full speed for fifty-two weeks in the year, finds it more difficult to arrange.

Walls. Sweep and wash thoroughly, paying particular attention to window-sills, windows, etc.

Floor. This will be done after all the other cleaning, and special care must be taken to remove any stains.

Cupboards and Drawers. Remove contents and wash or scour according to the kind, boiling tins if necessary. Scrub shelves and wash the outside, re-label where necessary.

Apparatus. Thoroughly clean all the parts, oiling and greasing where this is required: this is an excellent time to have special apparatus overhauled by the maker.

Stoves, etc. A very good weekly clean should be given to all cooking apparatus, and damaged or worn parts replaced.

N.B.—If the kitchen is shut up for any length of time, articles which might rust should be wrapped in newspaper, or put away in a cupboard; steamers, boilerettes, etc., can be covered with metal polish if they have to remain out in the kitchen or scullery.

LARDER

Daily. Collect together all 'left-overs' and use to the best advantage; put any food which is not to be used at once on to clean plates; wipe all shelves, refrigerator, bread cupboard, etc.

Sweep and wash floor and replace food on shelves.

Weekly. Remove all food and containers, such as cake tins, etc.; turn out refrigerator and cupboards; wash the walls, scrub shelves, and sweep and wash the floor.

Containers for cakes must be turned out and washed in rotation.

Special Clean. Before a holiday, empty all containers, wash and dry thoroughly, de-frost the refrigerator and leave absolutely clean and dry. After the vacation, sweep and wash walls, clean windows, paying special attention to gauze covering the windows, and scrub shelves and floor.

MILK LARDER

As for larder.

VEGETABLE LARDER

Daily. Sweep and wash floor if necessary; this will depend on the material of the floor; wash vegetable bins when empty.

Weekly. Scrub floor, and wash woodwork as required; wash windows.

Special Clean. Empty all bins and racks and scrub well before shutting up for the vacation; later clean walls, etc., as for general larder.

COLD STORES

Wipe shelves daily and wash shelves, wall, and floor as required; care must be taken not to raise the temperature in these rooms during cleaning.

Special Clean. De-frost, clean well, and leave doors open to dry the inside; later wash thoroughly before turning on the current.

STOREROOMS

Daily. Sweep and dust after the stores are given out.

Weekly. Wash any empty containers; wipe linoleum-covered shelves with a cloth wrung out in hot water; if the shelves are wood they may need to be scrubbed.

Sweep and wash floor, dust thoroughly; clean windows.

Special Clean. Empty all bins and containers and wash, using up all ingredients which will not keep. Scrub cupboards, and when dry put back all containers, re-labelling where necessary.

Later wash the outsides of the cupboards; wash walls and windows and scrub floors; stores can then be taken in at once, as the containers are ready for use.

CHAPTER XI

KITCHEN PLANNING

THE chapter on kitchen planning has been left almost to the last, as it is necessary to know what rooms are essential, how one room can be used for several purposes, and what apparatus will be needed before attempting to plan the kitchen premises.

No one plan of kitchen and kitchen offices could be said to be ideal for a particular type of institution, as the requirements will in all cases vary to a certain extent, but there are some foundation principles which can be said to apply to all.

THE SIZE

Before deciding this, consider first the type of meals which will have to be served from the kitchen and the number to be catered for, and from this plan the big apparatus which is essential and the apparatus which will be included if expenditure allows. Consider also the small apparatus which will be required and the cupboard space necessary for it; and the sinks, whether these will be for kitchen use only, or if the washing-up is also to be done in them.

Having planned all the fitments of the kitchen and ascertained the size of these, reduce their dimensions to a workable scale and cut out each piece of apparatus to scale, in paper.

Next, consider the relation of each piece of apparatus to the others and to the work with which it will be chiefly concerned; thus a vegetable boiler and steamer will need to be adjacent, while a mixer will have to be as near to the cake and pudding table as possible.

Work circuits must not be forgotten; each operation involved in the making and cooking of a dish should be one step nearer to the service exit, i.e. vegetables should pass from peeler to boiler and thence to a masher, if this is needed, or straight to a heater, without taking any backward steps. Work circuits must not cross, though this is not so necessary when the cooking is done by one worker as there is then no fear of two people colliding.

ARRANGEMENT

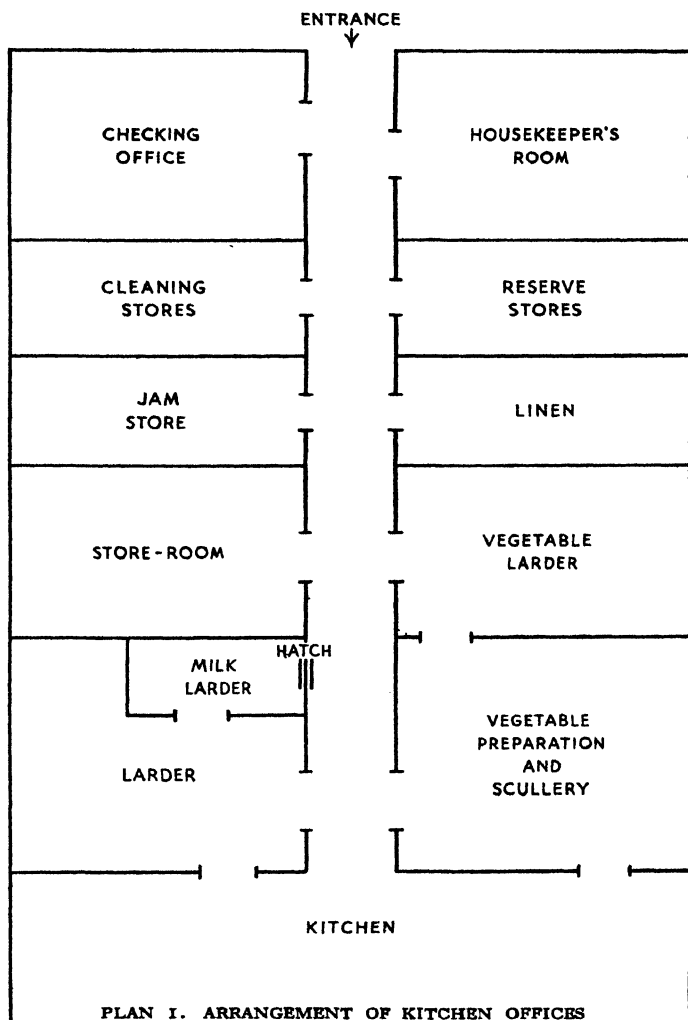
The small pieces of paper representing apparatus, cupboards, tables, and sinks, can then be moved about on a larger sheet of paper until the correct positions are found, and the approximate size of the kitchen ascertained.

It is not sufficient to determine the size of the kitchen on paper, but it should be chalked out to

its full size, plotting in the apparatus, etc., to the full dimensions and in the correct position. Then 'walk' some of the circuits to see if there is sufficient room for more than one worker to pass, whether space has been wasted, which will mean unnecessary steps and cleaning, and whether opened cupboards will impede progress; if so, it is advisable to leave more space or to have the cupboard doors on runners instead of being hinged.

This may sound laborious, especially as it usually has to be done many times before the desired result is reached, but once the kitchen is built it is too late to try and place apparatus correctly. It will then have to be arranged as best it can, often with no relation to its next-door neighbour, and the result may be seen in many kitchens to-day on which a great deal of money has been spent, but which are a daily source of irritation to the cook. Too often one meets them with baking ovens the full length of the kitchen, away from the pudding table and mixer, or with all the same type of fuel together, thus saving a small sum of money when fitting the kitchen but expending an unnecessary amount of energy for as long as the kitchen is used, because the electric toaster has to be next to the electric oven, while the only place for the bread machine is on the opposite wall.

Storerooms, larder, and servery must be thought out in the same way, again bearing in



PLAN I. ARRANGEMENT OF KITCHEN OFFICES

mind the type and quantity of food to be kept there and so arranged that these, too, follow a definite plan to fit in with the other work circuits, i.e. goods must pass straight from the tradesmen's entrance, or lift, to the storeroom, or larder, and thence to the preparation room or kitchen, each being one stage nearer the service exit.

Goods which are most frequently used must be nearer the kitchen than those less often required, i.e. the larder, vegetable larder, and milk larder should be as near the kitchen as possible, while cleaning stores, jam, and dry goods which are given out at a special time can be further away.

The diagram on the preceding page shows a very simple and successful method of arranging storerooms and larders.

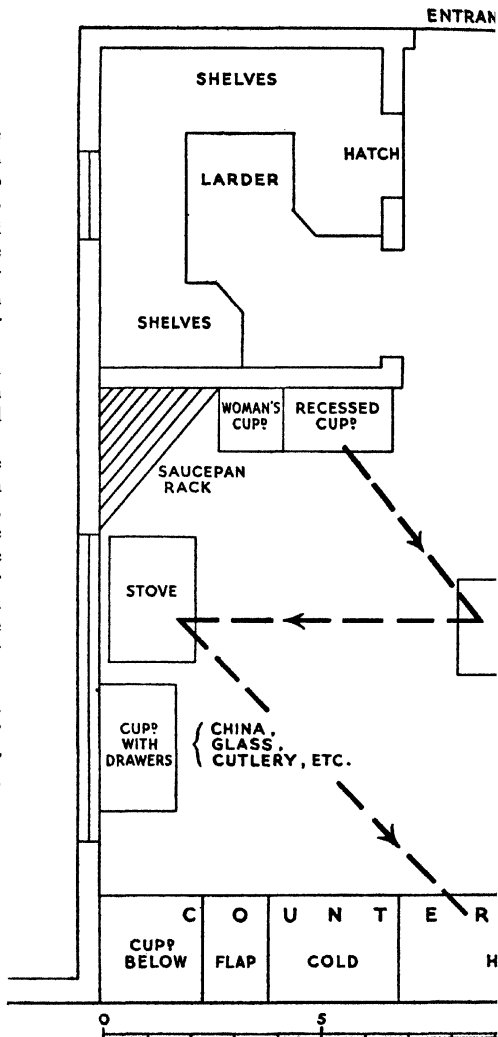
PLAN 2. SCHOOL KITCHEN CATERING FOR 100-150

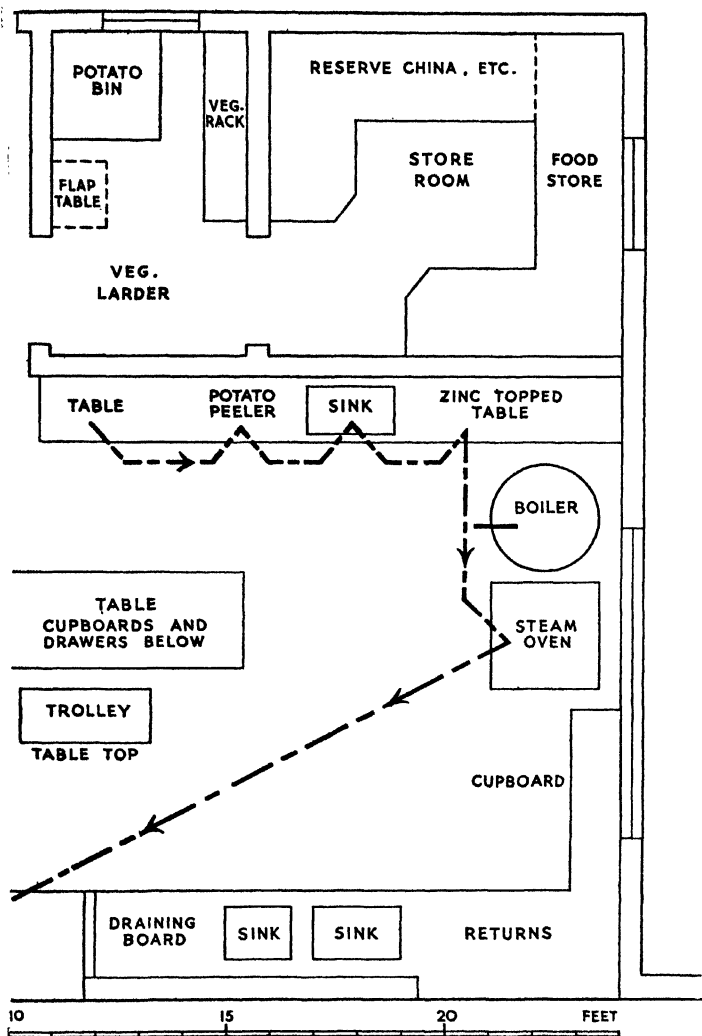
A kitchen suitable for a day-school catering for 100-150 children. The apparatus is simple and so arranged that the work can be done by one woman with additional help for vegetables.

The counter could be used as a cafeteria or for a more formal meal.

This plan could be used as a foundation for a works canteen, where the meals are simple and little variety is given, or for a boarding-school or nurses' home catering for smaller numbers.

This plan first appeared in 'Education' and is reprinted by courtesy of the Editor.





**PLAN 3. THE GLOUCESTERSHIRE TRAINING COLLEGE OF DOMESTIC
SCIENCE HALL OF RESIDENCE KITCHEN**

This plan shows a kitchen now in use and catering for between 150 and 200 residents. The area is rather larger than is necessary for this number, but the kitchen is sometimes used for a practice class.

The very great care and forethought taken when planning the kitchen can be seen if each work circuit is studied in detail.

(a) The washing-up circuit. China in the process of being washed passes by the shortest route, while silver and glass which is lighter is washed in the sinks to the left of the hatch and returned by trolley to its storage cupboard.

(b) Vegetables are carried from the vegetable larder to the preparation scullery and thence by a separate route to the vegetable boiler or steam-oven close by; a potato masher is the next piece of apparatus in the forward movement, or vegetables are taken straight to the hot closet. This has doors on both sides to facilitate easy removal.

(c) Meat and sweets are prepared on separate tables, the pudding table being nearest the baking ovens and store-cupboards with the mixer close by.

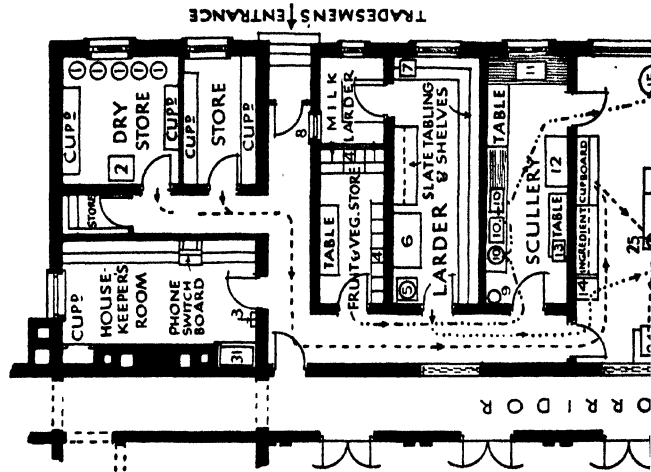
All dished food is put into the kitchen closet or taken direct to the servery heater, passing through one door or the adjacent hatch.

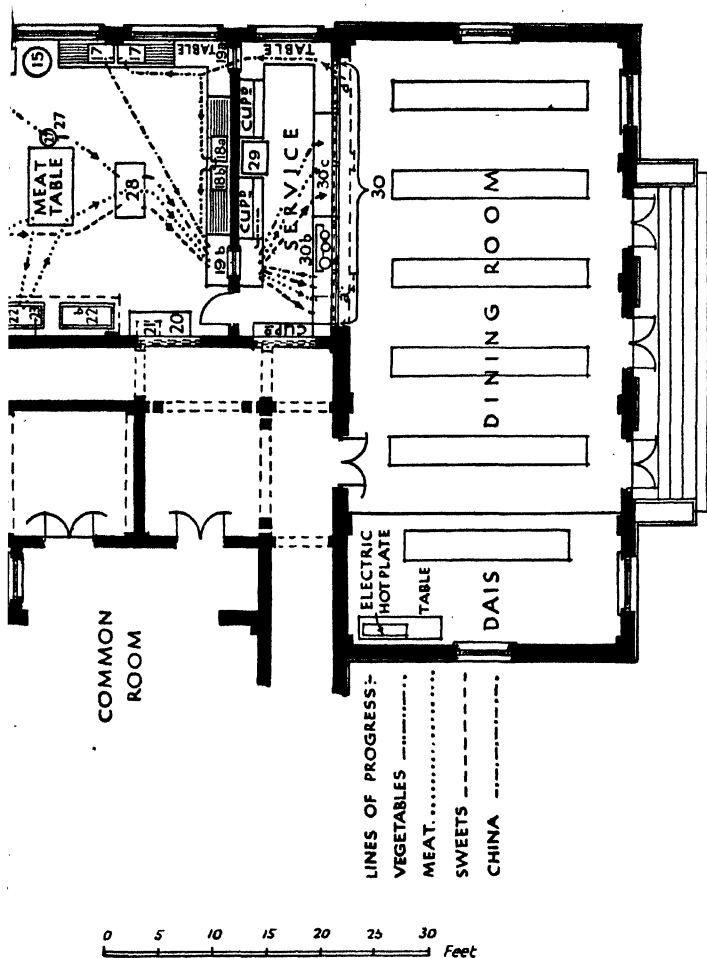
This plan could form the foundation for a kitchen attached to a canteen where a good choice of dishes is provided; for a boarding-school catering for a rather larger number; or for an hotel, though in the latter the service counter would have to be altered.

Reprinted by courtesy of the Principal.

NUMERICAL REFERENCE

- 1 & 4. Bins
2. Weighing-machine
3. Sick Room Telephone
5. Ice-cream Freezer
6. Refrigerator
7. Butter Pat Machine
8. Hatch
9. Rubbish Shoot
10. Vegetable Sinks and Potato Peeler
11. Saucepan Sink
12. Saucepan Rack
13. Potato Chip Machine
14. Chopping Block
15. Boilers (2)
16. Steam Oven
17. Teak Sinks and Drainers — Glass and Cutlery
- 18a. Teak Sinks and Drainers for China
- 18b. Return Hatch
- 19a. Return Hatch
- 19b. Issues Hatch
20. Table with Bread Cutter and Bread Crumber
21. Electric Toaster and Griller
- 22a. Gas Roasting Ovens
- 22b. Gas Boiling Table
23. Swivel Water Tap
24. Electric Baking Oven
25. Electric Mixing Machine
26. Marble Pastry Slab
27. Soup Siever and Potato Masher
28. Hot Closet
29. Refrigerator
- 30a. Cold Food Issues
- 30b. Tea, Coffee, and Hot Milk
- 30c. Hot Closets
- 30d. Return
31. Electric Lift for Luggage, Linen, and Sick Room Trolley





PLAN 4. KITCHEN TO CATER FOR ABOUT 400 PERSONS

A more elaborate type of kitchen suitable for a hospital distributing to dining-rooms on several floors, or for a large canteen or restaurant.

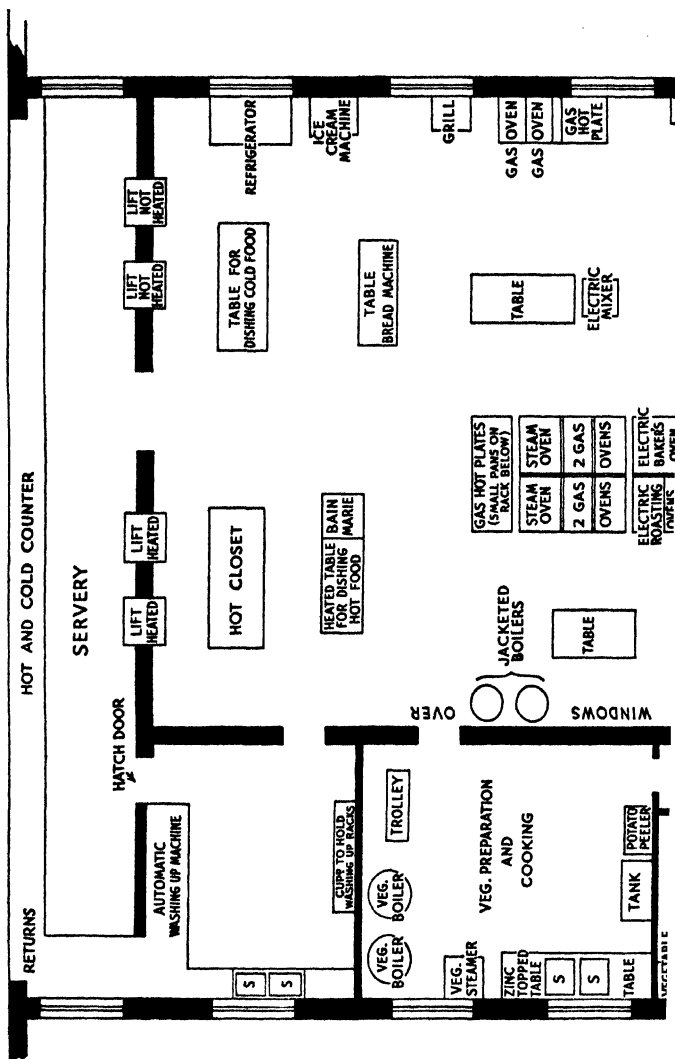
The lifts would be omitted where the service was confined to one floor.

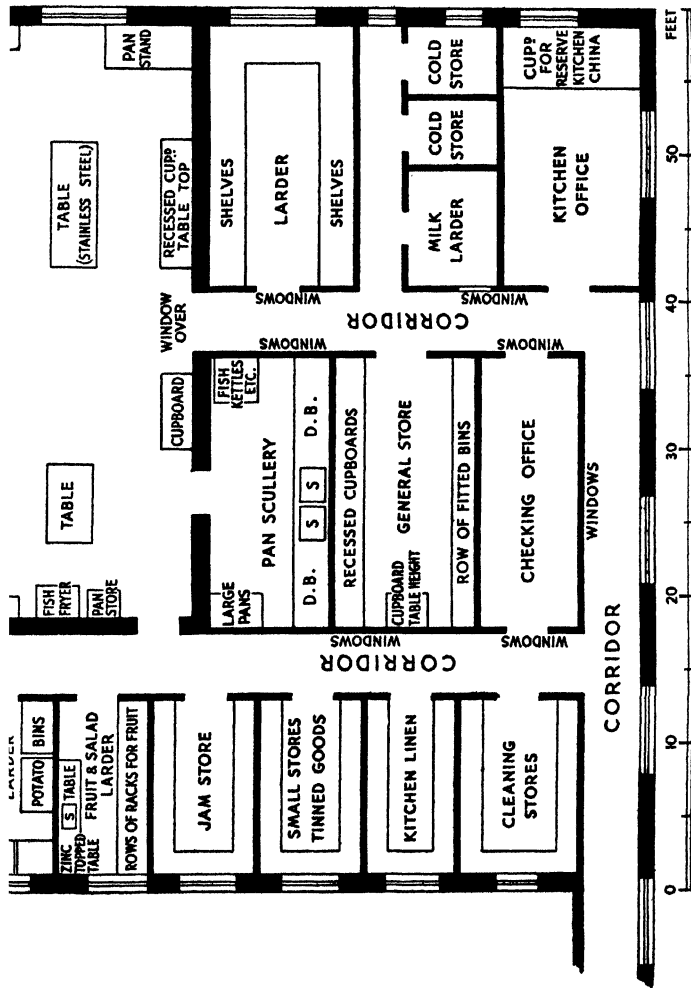
Very much care and forethought is necessary when planning a large kitchen, in order to arrange the apparatus in good sequence, and thus to obtain correct work circuits.

It should be remembered that the cook's time is the most important and her movements should be restricted to as small an area as possible.

Where several cooks are at work it may be best to plan the kitchen as several units, *i.e.* meat and fish, puddings, cakes, etc., each independent of the other though making up one complete whole.

DINING ROOM





CHAPTER XII

CAFETERIAS

WITHIN recent years the cafeteria type of service has become more popular in this country for the following reasons:

1. It is much quicker than a formal meal.
2. A smaller staff is necessary to serve the meal, therefore prices are lower.
3. Limited dining-room accommodation can be used to the best advantage, as one place can be used by several people in the course of an hour.
4. A bigger choice is possible than when food is served at table; this can be used as a means of instruction in food values and balanced meals.
5. Food can be served very hot.

A cafeteria counter is suitable for canteens, for restaurants where inexpensive meals are served, for day schools, and, in some cases, for college halls of residence, but it should be remembered that it is not a restful meal and should not form the only kind of service.

POSITION OF COUNTER

It is essential to have direct contact between the counter and the kitchen; this is most easily done by

a small servery between the two, with a hot closet opening both ways in the dividing wall and with hatches through which cold dishes can easily be passed.

THE COUNTER

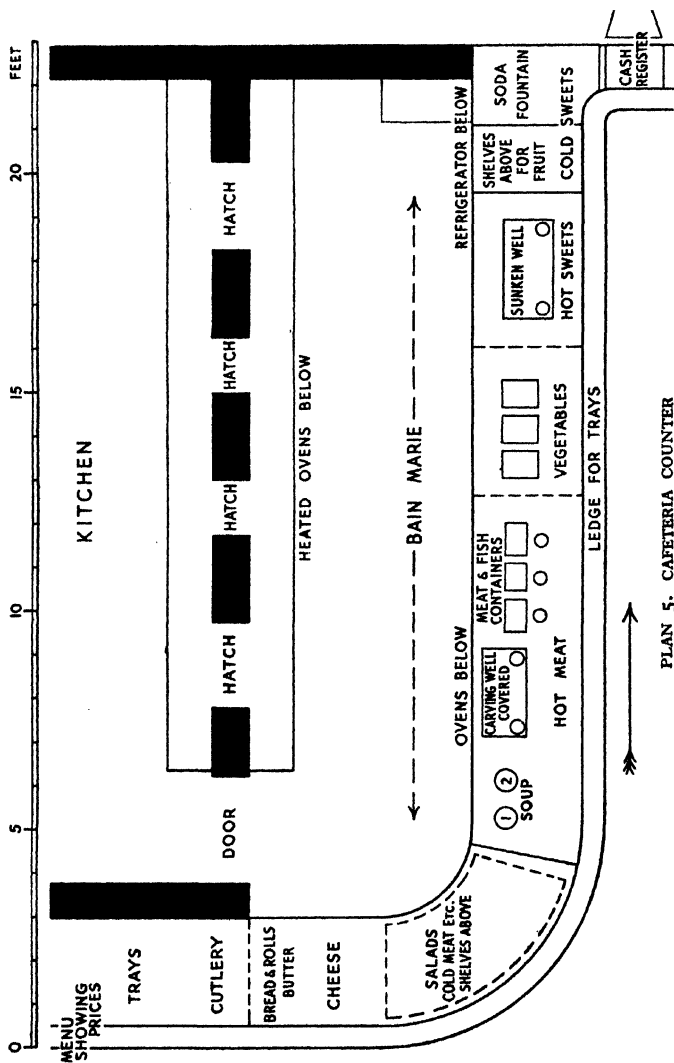
This should be divided into hot and cold sections; the arrangement will depend on the institution, the number of people to be served, and the variety of dishes offered.

A very simple counter suitable for a day school is shown on page 78 and the accompanying diagram shows an elaborate counter suitable for a canteen or restaurant providing from three to four hundred meals and offering a good choice.

Hot Section. 1. The lower portion is similar to a hot closet and can be heated by gas, steam, or electricity. It is used for heating plates, for dishes of food waiting to be served, or for piles of plates containing helpings of food.

2. Above the ovens or hot closet is a water trough about six to eight inches deep, which is filled with boiling water when the counter is in use.

3. Special containers which fit into the water trough are used in order to keep food without spoiling and to simplify serving. The number of containers will depend on the service; for a canteen or restaurant there will probably be two for soup, one for fish, two or more for meat, and several for vegetables. These must be carefully spaced to



PLAN 5. CAFETERIA COUNTER

allow room for plates to stand when dishing and should have accompanying containers for gravy and sauces. A carving-well may also be included, while a sunken well is provided for hot sweets, as these would usually spoil if turned into a container; this well should be two or three inches below the level of the counter.

The material for the counter should be one which is easily cleaned; stainless steel is best, though less expensive metals may be used. The front of this section can also be of stainless steel or specially treated aluminium, which is obtainable in the most attractive colours and is easy to clean.

Cold Section. The portion of cold counter allotted to food is usually about half the length of the hot section and where space is limited this can be further reduced by fixing shelves above and possibly below the counter, though where possible it is better to have a refrigerator below this section, as it is as important to serve cold food really cold as to serve hot food at the correct temperature.

The material used for the cold section can vary considerably; where possible stainless steel is best, but glass, wood, or enamel make good substitutes.

ARRANGEMENT OF COUNTER

Menu Board. This should be placed near the entrance door or at the end of the counter nearest to this door, and should show the menu for the

day with the price of each dish clearly marked, so as to afford opportunity of choosing the meal beforehand.

Trays and Cutlery. Trays should be in piles and the cutlery either in boxes or sets wrapped in paper napkins. The latter entails more work for the staff, but it has been found that insufficient cutlery is sometimes taken, or a different dish is chosen requiring more cutlery, and to get this the line has to be broken. The former method is quite suitable where people take this type of meal daily, but in a restaurant the latter has proved to be the best.

Food Counter. After the trays, etc., come a selection of breads, butter, cheese, and individual salads, with piles of small plates to accommodate these. This portion of the counter can be quite small, as additional supplies may be kept on shelves above and below the counter. The hot foods are arranged in sequence: soup, fish, meat, vegetables, and hot sweets, with adequate space in between for dishing.

Cold sweets, fruit, ices, and cakes form the last section of the counter and again shelves provide additional space for dished foods. Coffee and tea urns are occasionally placed at the end of the counter, but this is not good as the drink would not be very hot if left until the rest of the meal was eaten; it is difficult to carry a full cup on an already well-filled tray, and if the dining-room is used for other meals it is better to be able to shut

up the large counter and serve drinks from a smaller counter placed in another part of the room. A water fountain may be placed at the end of the counter, but this again provides difficulties and jugs of water are usually placed on the tables.

A rail or ledge runs along the front of the counter on which trays can easily be balanced, and posts in the floor, about three feet away from the counter, and connected by ropes or chains, prevent the line from being broken. This ensures that every one passes the paying desk and that no one emerges at the wrong place to collide with someone who has come from the opposite direction.

METHODS OF PAYING

1. Tickets can be bought beforehand, and as each dish is taken a ticket for the correct amount is placed on the file provided; this is suitable for canteens, etc., where tickets may be purchased at certain times, daily or weekly.

2. One or two of the staff sit at the end of the line, scrutinize the contents of the tray, and take the necessary money; where numbers are large it is essential to have two people, one to scrutinize and one to give change. This method is best for a restaurant.

CLEARING THE DINING-ROOM

In an ordered community, such as a school, college, or some canteens, each member has to collect his or her plates, etc., and return these on the tray to a hatch, which must not interfere with the service counter but which must be adjacent to the washing-up scullery. It is not possible to demand this in a public dining-room and arrangements must be made for clearing.

STAFF REQUIRED

This will necessarily depend on the variety of dishes served, for it is not possible for one maid to serve more than one course if the service is to be quick. There will also have to be an overseer who will see when replacements are necessary and have additional supplies passed through from the kitchen.

One or two waitresses will be necessary in the dining-room to refill water jugs and tidy up as required.

EQUIPMENT

This has to be rather larger than would be required for a formal meal; where there is constant demand for places it is essential to have twice as much equipment as the number of places.

in the dining-room, but if the demand is intermittent a slightly smaller quantity would be sufficient.

Trays. These should be light, easily cleaned, attractive, and sufficiently large to take a full meal.

Aluminium, either plain or painted, is excellent, but a strong, grooved kind should be bought to give good wear. Bakelite is cheaper and easy to clean but cannot give the same length of wear as metal. Wooden trays are heavy and require more cleaning.

Whatever type of tray is chosen, it should be made to stack in piles to save space when storing.

Cutlery. Choose a good quality; a cleaning machine will prove very labour-saving.

China. A good quality china will not chip so easily, and a patterned type that can be replaced should be chosen.

Covers. In order that a dish shall not become cold while the previous course is being eaten, all hot dishes should be provided with a lid; these can be made in different sizes to fit different plates and should be about one inch smaller than the plate and one to one and a half inches deep.

For stacking piles of dished food in the hot closet metal rings can be used; these are not so successful but may be bought very much more cheaply.

LEDGES FOR TRAYS

Unless the meal is to be eaten off the tray, which is not an attractive method, some provision must be made for the tray. A ledge behind the chair is good, or slots can be made under the table, though this is not possible if the dining-room is used for any other purpose and the tables have to be packed away.

PREPARATION BEFORE SERVING THE MEAL

As much food as possible should be served beforehand, and stacked up in piles in the hot closet: this is particularly necessary where the service must be speedy.

Ladles and service spoons of uniform size should be used and food bought in even portions as far as possible.

CHAPTER XIII

INSTITUTIONAL ACCOUNTS

THE two most important books required by an institution are:

A Cash Book.

A Ledger.

The other necessary but subsidiary books are:

A Petty Cash Book.

A Wages Book.

A Receipt Book or Books.

A Postage Book.

The Cash Book shows a complete record of all receipts and payments in chronological order.

CASH ACCOUNT

September 1938

September 1930									
Dr			Cr						
		£	s.	d.			£	s.	d.
	To Balance forward	52	10	0					
Sept. 2	„ Cheque	100	0	0	Sept. 4	By Petty Cash	10	0	0
8	„ Fees	250	0	0	6	„ Butcher	47	5	0
14	„ Sundries	5	0	0		„ Grocer	52	0	6
						„ Wages	17	6	3
						„ Balance	280	18	3
		407	10	0			407	10	0

The left-hand page records receipts and the right-hand page payments as shown above, and is

most suitable for institutions where all possible payments are made by cheque, only very small sums being paid out of petty cash.

The Ledger should show at a glance how the money has been spent, and is therefore a classified form of accounts.

Accounts in this book are entered under headings:

- Food. Baker. In each case giving the
Butcher. name of the firm.
Greengrocer.
- Fuel. Coke.
Gas.
- Repairs.
- Replacements.
- Wages.

LEDGER

Date	Heading	Firm	Weeks of the Month												Total per Month			1
			1			2			3			4						
			£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£
Sept. 1938	Food	Butcher	9	10	3	7	14	5	4	8	9	1	6	5	22	19	10	
		Dairy	11	6	1	9	18	2	7	5	7	8	9	8	36	19	6	
		Grocer	17	13	0	1	19	7	10	6	6	9	7	6	39	6	7	99
	Fuel	Coke				6	0	0							6	0	0	
		Gas										17	6	7	17	6	7	23
			38	9	4	25	12	2	22	0	10	36	10	2	122	12	6	122

PETTY CASH ACCOUNT

Date		Receipt		Date	Total			Postage			Stationery			Fares			Sum
1938		£	s.	d.	1938		£	s.	d.	£	s.	d.	£	s.	d.	£	s.
Sept. 2		5	0	0	Sept. 4. Stamps		10	0	8	10	0	8					
					7. Telegram				8								
					8. Notepaper		2	3					2	3			
					14. Fare		1	4							1	4	
					22. Stamps		10	0		10	0						
					24. Gratuity		1	0									
							1	5	3	1	0	8		2	3	1	4
					Balance		3	14	9								
		5	0	0			5	0	0								

SUBSIDIARY BOOKS

Petty Cash. This should record all small outgoing sums, such as small bills, stamps, etc., and can be worked in two ways.

1. A sum, such as five pounds, can be allotted to petty cash, and when used, and all the receipts obtained, a further sum can be drawn.

2. This is known as the Imprest Account. A sum per week or month is allotted and at the end of the given time all receipts are produced and the account reimbursed to the amount paid out, i.e. if the receipts amount to £2 1s. 6d., this sum is claimed to make up the account to five pounds again.

Wages Book. In many ways it is better to keep the weekly or monthly wages on separate sheets in a loose-leaf file, though a book can be used if preferred.

Where wages are paid in cash a cheque is drawn for the full amount and a record kept as shown:

WAGES SHEET

Week ending September 30th, 1938

Name	Gross Wage			Employee's Contribution						Net Wage			Sig'- ture	Employer's Contribution					
				Health and In- surance		Unem- ploy- ment		Total						Health and In- surance		Unem- ploy- ment		T	
	£	s.	d.	s.	d.	s.	d.	s.	d.	£	s.	d.		s.	d.	s.	d.	s.	
Smith, John	2	10	0		9		10	1	7	2	8	5			9		10	1	
Jones, Mary	1	5	0		7		8	1	3	1	3	9			7		8	1	
	3	15	0	1	4	1	6	2	10	3	12	2		1	4	1	6	2	

SUMMARY

Net wages	£3	12	2
Stamps: Health		2	8
Unemployment		3	0
Total amount of cheque	£3	17	10

Signature

Date

Postage Book. This must record the dispatch of all letters and parcels, showing the date, the name to whom the letter is sent, and the town or county to which it is sent.

Each page must be totalled and this amount carried forward to the following page.

This account should be balanced monthly and the total entered in the Petty Cash Book.

Receipt Book. A duplicate receipt book must be kept for all moneys received; this must be totalled at the end of the month and the money paid into the bank. This will be entered on the receipt side of the cash account.

TRIAL BALANCE

It is advisable at the end of each financial year to test the accuracy of the accounts, and it is done in the following way:

$$\left. \begin{array}{l} \text{Balance at beginning of year} \\ + \\ \text{Sums acquired during year} \end{array} \right\} = \left\{ \begin{array}{l} \text{Expenditure during year} \\ + \\ \text{Balance at end of year} \end{array} \right.$$

TRIAL BALANCE

		March 31st, 1938					
April 1st, 1937		Dr			Cr		
		£	s.	d.	£	s.	d.
To Balance—Brought forward, Cash at Bank and in Hand					25	10	6
,, Wages		230	0	0			
,, Insurance		12	5	0			
,, Food		1142	18	9			
,, Laundry		98	14	4			
,, Postages, Stationery, etc.		73	8	11			
,, Renewals		107	16	6			
,, Rent, Rates		380	0	0			
,, Fees					2900	0	0
,, Sundry Receipts					80	9	0
,, Balance in Bank and in Hand		960	16	0			
		3005	19	6	3005	19	6

INCOME AND EXPENDITURE ACCOUNT

This account should show whether the institution has kept within its income for the year, so that the balance in hand from the previous year and the balance in hand at the end of the year are omitted. This account may also show the percentage of the income spent on food, wages, fuel, etc.

INCOME AND EXPENDITURE ACCOUNT

Year ending March 31st, 1938

<i>Dr</i>						<i>Cr</i>	
<i>Expenditure</i>	<i>Percentage of Total Receipts</i>					<i>Income</i>	
		£	s.	d.			£
To Food	30	1200	0	0	By Fees		3500
„ Wages and Insurance	20	800	0	0	„ Subscriptions		450
„ Laundry	4	160	0	0	„ Sundries		50
„ Rent, Rates, and Insurance	10	400	0	0			
„ Repairs, Renewals, and Upkeep of Building	12	480	0	0			
„ Fuel, Water, etc.	8	320	0	0			
„ Postage and Stationery	1	40	0	0			
„ Sundries	5	200	0	0			
„ Balance	10	400	0	0			
	100	4000	0	0			4000

ANNUAL AUDIT

The auditors must be provided with all books relating to the accounts for the year, i.e. with the

cash book and ledger, the wage books, the petty cash and postage books, order books, etc., and all receipt books and receipts.

All receipts must be numbered and arranged to correspond with the entries in the cash book. Petty cash vouchers are numbered and arranged in the same way but separately, and each set of vouchers is pinned together and clearly marked.

PART TWO
DIETS, MENUS, AND COSTING

DIETS, CATERING, AND MENU PLANNING

BEFORE discussing menus and catering for institutions it is essential to decide what are the necessary factors in a sound diet, one which will not only maintain health, but will help in the prevention of disease.

Food constituents are divided into two main classes:

(a) ORGANIC FOODS

During digestion organic foods are broken down and supply the body with heat and energy and also material for growth and repair.

Organic foods are divided into three, viz.:

1. *Protein*: (a) animal, (b) vegetable. Animal protein is found largely in milk, fish, meat, eggs, and cheese, and vegetable protein in pulses, cereals, wholemeal flour, etc.

Both classes of protein provide material for growth and repair worn-out tissue, and this food constituent should form about fifteen per cent of the diet. Vegetable proteins are more cheaply obtained, but cannot be used to replace the more valuable animal proteins, about half of each kind being necessary in a good diet.

It is of particular importance that the required amount of protein should be given in children's diets.

2. *Fat*. Fat is found in oily fish, in the fat of meat, cream, cheese, fats such as butter, dripping, margarine, etc., and to a small extent in milk. Fat supplies the body with heat and energy, but the digestion of this food constituent is comparatively slow, taking about four to five hours before any benefit is felt by the body. It should form about fifteen to eighteen per cent of the diet.

3. *Carbohydrates*: (a) sugar, (b) starch. Sugar is found in preserves of all kinds, in sugar itself, and in fruit, particularly dried fruit, while starch is found in flour, bread, cereals, and root vegetables.

Both starch and sugar supply the body with heat and energy, very much more quickly than fat, though in a smaller proportion (one ounce of fat supplies the body with about twice as much heat as an ounce of sugar or starch).

Carbohydrate forms the bulk of the diet, about sixty-six per cent; there is seldom a deficiency of this food constituent, too often it is in too large a proportion, making the diet 'stodgy.'

(b) INORGANIC FOODS

Inorganic foods supply no actual food to the body but act as regulators and are of vital impor-

tance in maintaining health and in the prevention of disease.

1. *Minerals.* The most important minerals, calcium, potassium, iron, and phosphorus, are chiefly found in milk, and in vegetables and fruit, particularly citrous fruit.

Calcium is necessary in bone formation and all minerals help to keep the blood in a good condition.

It is important to remember that if vegetables are cooked in large quantities of water, and this liquid is not used for soup or gravy, most of the mineral content is lost.

2. *Vitamins.* Lack of these in the diet may cause disease, or leave the body more prone to infection.

Vitamins A and D are found chiefly in milk, meat, fish, liver, eggs, and some vegetables, such as carrots; vitamin D is now known to be connected with sunshine, so that during the winter months the inclusion of a small quantity of cod-liver oil or halibut oil, both of which are rich in this vitamin, is of great benefit to growing children.

Vitamins B and C are found mostly in fruit and vegetables; again citrous fruit, especially oranges, are the most valuable. These particular vitamins are easily destroyed by prolonged cooking and by oxidation, hence the importance of a good supply of fresh fruit and vegetables in the diet.

3. *Liquid.* A minimum of three pints of liquid should be taken daily; of this one-third should be

water and at least one pint of milk must be allowed per head per day, and more if possible for children.

FOOD FOR MASTICATION

It is important to include some food which requires mastication in every meal, and special attention must be paid to this when catering for children.

It will be seen that a day's diet for a normal person must include foods which will supply animal and vegetable protein, fats, sugar, and starch, and those foods rich in minerals and vitamins. No one food is able to supply all the necessary food constituents; a well-balanced diet is obtained by providing as large a variety as possible.

The following table shows in quantities the normal requirements for a girl of from fifteen to eighteen years of age; it would also be suitable for a woman doing sedentary work.

The table can be adjusted for boys, men, and younger children as follows:

Boys of fifteen to eighteen years of age, or men doing sedentary work: add twenty-five per cent.

Men doing manual work: add thirty to forty per cent according to the work, especially increase carbohydrate for very heavy labour.

Women doing manual work: add ten to fifteen per cent.

Children under fifteen years of age: deduct five per cent for each year under that age.

In all cases this table can only be used as an approximate amount, as height and weight are important factors to be considered, but it should prove satisfactory when catering for numbers and form a basis on which to calculate the quantity of foodstuff required.

TABLE SHOWING QUANTITY OF FOOD REQUIRED
PER DAY BY A GIRL OF FROM FIFTEEN TO
EIGHTEEN YEARS

Approximate number of Calories, 2,800

Percentage of Calories from:

Cereals 30	Milk 13	Fruit and vegetables 15	Fat 16	Sugar 10	Meat 16
					<i>Approximate Number of Calories</i>
Milk		1 pt.			
Meat, or		4 oz.			
Fish		5 oz.			750
Sausage or egg or bacon		2 oz.			
Cheese		$\frac{3}{4}$ —1 oz.			
Butter		minimum 1 oz.			217
Margarine or lard or dripping		$\frac{1}{2}$ oz.			110
Bread (half brown)		10—12 oz.			837
Cereal		1 oz.			100
Flour		2 oz.			200
Sugar		1 $\frac{1}{2}$ oz.			165
Dried fruit		1 oz.			75
Jam, marmalade, etc.		1 $\frac{1}{2}$ oz.			150
Potatoes		6 oz.			120
Cabbage, etc.		4—5 oz.			35
Salad plants, tomatoes, etc.		2 oz.			14
Fresh fruit		4 oz.			100
					2,873

PLANNING MENUS

How the food constituents are divided between the various meals must depend on the institution; in some the main meal will be in the middle of the day, in others at night; some will give a high tea and some supper.

It is advisable to allow nearly half the protein content for the main meal, and to divide the remainder between two other meals, i.e. between breakfast and supper or breakfast and high tea, and not, as is so often the case, to give all the protein at breakfast and dinner, leaving the later meals in the day with nothing but carbohydrate.

Breakfast. To establish good habits fruit should be given here, or a fruit drink earlier; also cereal or porridge, as these will provide heat and energy quickly, fat in some form to provide heat and energy for the later part of the morning, and a food containing protein.

Toast is excellent for mastication, but where it is impossible to make this for the whole establishment, bread fried in deep fat can often be served with the cooked dish.

Liquid in the form of tea, coffee, or milk must be given, though the latter is better for children and can be varied at times with cocoa, etc.

Mid-morning Lunch. If meals are given at four-hour intervals this should not be necessary, though

a drink is often given. 'Milky' drinks, or those made from fresh fruit juice, are excellent.

The Main Meal. This must include a good variety of foods supplying animal and vegetable proteins, fresh and cooked vegetables, fruit, fresh or cooked, as often as possible, and, for healthy appetites, steamed and baked puddings, including syrup or jam, or dried fruit.

A very good custom is found in many schools of providing a milk pudding for second helpings, or as an alternative sweet; if well made it is seldom that any is not eaten.

Water should be given to drink, and bread may be served with the meal, though an extra helping of potato would be better.

Tea. This will be a small meal for many adults, but not for growing boys and girls, or even young men and women; it should include white and wholemeal bread, butter or vitaminized margarine, sugar from preserve or cake, and possibly a salad food if the day's diet is lacking in fresh vegetables.

High Tea or Supper. As this is the last meal of the day, care must be taken to supply the body with sufficient food to last until next morning.

A 'cooked dish' should be included, one which will contain protein, vegetables, or salad or fruit; the remainder of the meal will necessarily depend on the other meals of the day; jam or cake may be included, or cheese, while nuts and dates are

valuable food constituents and help to provide variety in the diet.

The drink provided at this meal will vary; if one pint of milk per head has already been taken, water is sufficient, but often this meal includes a drink made with milk, such as Instant Postum, cocoa, etc.

MENUS

Illustrative menus for varying types of institutions, catering at different sums per head per week, are suggested in the following pages.

As space allows for only one week's menu for summer and one for winter for each type of institution, these are not meant to be repeated, but used as a guide.

The menus for both the Women's and the Men's Hall of Residence omit lunch on weekdays, as in many communities of this kind lunch on weekdays is not provided in the Hall.

The menus showing quantities and costing have all been calculated and are dietetically sound.

MENU FOR ORPHANAGE

<i>Meal</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Pears Ham Bread and vitam- inized margarine Honey Milk or tea	Oranges Bacon and fried bread Bread and butter Milk or tea	Stewed rhubarb Fish and potato balls Bread and vitam- inized margarine Marmalade Milk or tea
Dinner	Roast mutton and mint sauce Potatoes, broad beans Gooseberry fool and sponge fingers	Meat and potato casserole Cabbage Chocolate rice mould	Cold, salt beef Potatoes, salad Syrup sponge and sauce
High tea (except on Sunday)	Bread and butter Jam Gingerbread Tea or milk	Bread and vita- minized margarine Cheese and tomato Dates Tea or milk	Bread and vita- minized margarine Scrambled egg on fried bread Oranges Milk or Instant Postum
Bedtime drink	Cocoa or lemonade Biscuits	Cocoa or lemonade	Cocoa or lemonade

Average cost per

CATERING FOR 100 CHILDREN: SUMMER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Prunes Porridge, etc. Bread and vitaminized margarine Treacle Milk or tea	Oranges Porridge, etc. Bread and vitaminized margarine Milk or tea	Apples Sausages and fried bread Bread and butter Milk or tea	Prunes Porridge, etc. Bread and vitaminized margarine Marmalade Milk or tea
Summer stew and dumplings Potatoes, mixed vegetables Fresh fruit in milk jelly	Hamburg steak Potatoes, cauliflower Gooseberry charlotte Custard	Eggs, white sauce, and cheese Potatoes, broad beans Steamed rhubarb puddings	Veal fricassée Potatoes, cabbage Steamed chocolate pudding and sauce
Bread and butter Herrings fried in oatmeal Milk or Instant Postum Cocoa or lemonade	Bread and vitaminized margarine Shepherd's pie Jam Milk or Instant Postum Cocoa or lemonade	Bread and butter Pea soup Rock buns Milk or tea Cocoa or lemonade	Bread and vitaminized margarine Cheese and lettuce Apples Milk or tea Cocoa or lemonade

head per week: 6s.

MENU FOR ORPHANAGE

<i>Meal</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Oranges Scrambled egg on fried bread Bread, vitaminized margarine Marmalade Milk or tea	Prunes Porridge, milk and sugar Bread, vitaminized margarine Home made paste Milk or tea	Apricots Bacon and fried potato Bread, vitaminized margarine Milk or tea
Dinner	Roast beef, Yorkshire pudding Roast potatoes, cabbage Fruit tart and custard Bread Water	Cold beef Potatoes in jackets Beetroot Steamed date pudding Syrup sauce Bread Water	Liver hot-pot Potatoes, carrots Baked stuffed apples Rice pudding Bread Water
High tea (except on Sunday)	Bread and butter Jam Cherry cake Milk or tea	Bread and vitaminized margarine Pea soup Treacle Apples Instant Postum or milk	Bread and butter Cheese Watercress Gingerbread Milk or tea
Bedtime drink	Cocoa and biscuits	Cocoa	Cocoa

CATERING FOR 100 CHILDREN: WINTER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Apples Porridge, milk and sugar Bread and butter Treacle Milk or tea	Oranges Porridge, milk and sugar Bread and butter Fried bread Milk or tea	Prunes Ham Bread and butter Milk or tea	Figs Bubble and squeak Fried bread Bread and butter Milk or tea
Boiled mutton Parsley sauce Potatoes, mixed vegetables Queen of pud - dings Bread Water	Mince and rice Potatoes, cab - bage Steamed apricot pudding Custard Bread Water	Fish and tomato pie Potatoes, onions Railway pudding and jam Bread Water	Exeter stew and dumplings Potatoes, sprouts Banana trifle Bread Water
Bread and vita- minized margarine Stuffed tomatoes on fried bread Jam Milk or tea	Bread and butter Cauliflower au gratin Instant Postum or milk	Bread and vita- minized margarine Lentil soup Toast Oranges Instant Postum or milk	Bread and butter Fish cakes Jam Tea or milk
Cocoa	Cocoa	Cocoa	Cocoa

head per week: 6s. 4d.

COSTING: ORPHANAGE

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Milk for whole day, except cooking whole skim	12½ gallons	12½ gallons	12½ gallons	12½ gallons

BREAKFAST

Fruit	Oranges. 100 at 1 <i>d.</i> 8 <i>s.</i> 4 <i>d.</i>	Prunes. 9 lb. at 7 <i>d.</i> 5 <i>s.</i> 3 <i>d.</i>	Apricots. 8 lb. at 9 <i>d.</i> 6 <i>s.</i>	Apples. 100 at ¾ <i>d.</i> 6 <i>s.</i> 3 <i>d.</i>
Bread: brown and white	30 lb.	25 lb.	30 lb.	25 lb.
Oatmeal		4½ lb.		4½ lb.
Butter				5 lb.
Vitaminized margarine	3 lb.	5 lb.	5 lb.	
Dripping	2 lb.		1 lb.	
Marmalade	5 lb.			
Treacle				5 lb.
Jam				
Sugar, brown	3 lb.	6 lb.	3 lb.	6 lb.
Tea	½ lb.	½ lb.	½ lb.	½ lb.
Eggs, pickled	75			
Home-made paste		3 lb.		
Bacon			7 lb.	
Potatoes			12 lb.	
Ham				
Cabbage				

CATERING FOR 100: WINTER

Thursday	Friday	Saturday	Total	£	s.	d.
12½ gallons	12½ gallons	12½ gallons	40 gallons whole at 2s. 48 gallons skim at 4d.	4	16	0

BREAKFAST

Oranges. 100 at 1d. 8s. 4d.	Prunes. 9 lb. at 7d. 5s. 3d.	Figs. 8 lb. at 8d. 5s. 4d.		2	4	9
25 lb.	30 lb.	30 lb.	195 lb. at 2d.	1	12	6
4½ lb.			13½ lb. at 2½d.		2	10
		3 lb.	8 lb. at 1s.		8	0
2 lb.	5 lb.		20 lb. at 8d.	1	3	4
4 lb		1 lb.	8 lb. at 6d.		4	0
			5 lb. at 3½d.		1	6
			5 lb. at 5d.		2	1
	5 lb.		5 lb. at 3½d.		1	6
6 lb.	3 lb.	3 lb.	30 lb. at 2d.		5	0
½ lb.	½ lb.	½ lb.	3½ lb. at 1s. 2d.		4	1
			6½ doz. at 1s. 4d.		8	4
			3 lb. at 1s.		3	0
			7 lb. at 1s.		7	0
		12 lb.	24 lb. at ¾d.		1	6
	8 lb. (raw)		8 lb. at 1s. 1d.		8	8
		10 lb.	10 lb. at 1½d.		1	3
				7	9	4

COSTING: ORPHANAGE

DINNER

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Meat or Fish	50 lb. sirloin at 9d.		16 lb. liver at 1s.; 4 lb. pickled pork at 1s.	30 lb. leg mutton at 9d.
	£1 17s. 6d.		£1	£1 2s. 6d.
Potatoes	40 lb.	40 lb.	40 lb.	40 lb.
Cabbage	36 lb.			
Beetroot		30 lb.		
Carrots			30 lb.	12 lb.
Turnips			4 lb.	8 lb.
Onions			4 lb.	12 lb.
Brussels sprouts				
Milk, skim	8 pt. + 8 pt.	2 pt.	25 pt.	8 pt. + 10 pt.
Flour	4 lb. + 8 lb.	10 lb.		1 lb.
Eggs, pickled	8	6		12
Margarine			1 lb.	1 lb. + 1 lb.
Rice			3 lb.	
Tomatoes, tinned				
Suet		4 lb.		
Baking powder	2 oz.	4 oz.		
Custard powder	1 lb.			
Sugar, brown	1 lb. + 6 lb.	3 lb.	4 lb. + 2 lb.	3 lb.
Fruit, apples	20 lb.		20 lb.	
Dates		4 lb.		
Sultanas			1 lb.	
Bread	6 lb.	6 lb.	6 lb.	6 lb. + 6 lb.
Jam				4 lb.
Apricots, dried				
Coco-nut				
Sponge cakes				
Bananas				

CATERING FOR 100: WINTER

DINNER

Thursday	Friday	Saturday	Total	£	s.	d.
16 lb. minced beef at 8d.	20 lb. cod at 6d.	22 lb. steak at 8d.				
10s. 8d.	10s.	14s. 8d.		5	15	4
40 lb.	40 lb.	35 lb.	275 lb. at $\frac{3}{4}d.$		17	2
36 lb.			72 lb. at $1\frac{1}{2}d.$		9	0
			30 lb. at 2d.		5	0
		4 lb.	46 lb. at $\frac{1}{2}d.$		5	9
		2 lb.	14 lb. at $1\frac{1}{2}d.$		1	9
	30 lb.	4 lb.	50 lb. at $1\frac{1}{2}d.$		6	3
		30 lb.	30 lb. at $1\frac{1}{2}d.$		4	5
8 pt.	6 pt. + 2 pt.	12 pt.	11 gallons at 4d.		3	8
8 lb.	$\frac{3}{4}$ lb. + 8 lb.	3 lb.	42 $\frac{1}{2}$ lb. at $1\frac{1}{2}d.$		6	3
			26 at 1s. 4d. doz.		2	11
	$\frac{3}{4}$ lb. + 4 lb.		7 $\frac{1}{2}$ lb. at 5d.		3	3
3 lb.			6 lb. at 2 $\frac{1}{2}d.$		1	3
	3 tins		3 tins at 1s.		3	0
3 lb.		1 lb.	8 lb. at 10d.		6	8
2 oz.	2 oz.	2 oz.	$\frac{3}{4}$ lb. at 1s.			9
1 lb.		1 $\frac{1}{4}$ lb.	3 $\frac{1}{4}$ lb. at 1s.		3	3
4 lb. + 1 lb.	4 lb.	1 $\frac{1}{4}$ lb.	29 $\frac{1}{2}$ lb. at 2d.		4	11
			40 lb. at 2d.		6	8
			4 lb. at 6d.		2	0
			1 lb. at 5d.			5
6 lb.	6 lb.	6 lb.	48 lb. at 2d.		8	0
	4 lb.	1 lb.	9 lb. at 3 $\frac{1}{2}d.$		2	8
9 lb.			9 lb. at 9d.		6	9
	1 lb.		1 lb. at 5d.			5
		5 doz.	5 doz. at 10d. doz.		4	2
		4 doz.	4 doz. at 10d. doz.		3	4
				11	15	0

COSTING: ORPHANAGE

HIGH TEA, EXCEPT ON SUNDAY

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Tea	$\frac{1}{2}$ lb.		$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.
Instant Postum		1 tin		
Sugar	3 lb. + 3 lb.	3 lb.	3 lb. + 2 lb.	3 lb.
Bread:				
brown and white	36 lb.	36 lb.	36 lb.	36 lb.
Butter	5 lb.		5 lb.	
Vitaminized margarine		5 lb.		5 lb.
Jam	5 lb.			5 lb.
Flour	6 lb.	$1\frac{1}{2}$ lb.	6 lb.	
Margarine	3 lb.		$2\frac{1}{2}$ lb.	
Cherries	2 lb.			
Baking powder	4 oz.		4 oz.	
Milk, skim	2 pt.	6 pt.	2 pt.	
Eggs, pickled	6		4	
Lentils, Peas, dried		4 lb.		
Carrots		4 lb.		
Onions		4 lb.		
Treacle		4 lb.	6 lb.	
Fruit		Apples. 100 at $\frac{1}{2}d.$ 6s. 3d.		
Cheese			6 lb.	
Watercress			6 lb.	
Ginger			4 oz.	
Tomatoes				14 lb.
Filling:				
Minced meat from previous day				
Dripping		$\frac{1}{2}$ lb.		2 lb.
Cauliflower				
Finnan haddock				
Potatoes				

CATERING FOR 100: WINTER (cont.)

HIGH TEA, EXCEPT ON SUNDAY

<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Total</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
1 tin 3 lb.	1 tin 3 lb.	$\frac{1}{2}$ lb. 3 lb.	2 lb. at 1s. 2d. 3 tins at 1s. 7d. 26 lb. at 2d.		2	4
36 lb. 5 lb.	36 lb.	36 lb.	252 lb. at 2d. 15 lb. at 1s.	2	2	0
	5 lb.	5 lb.	20 lb. at 8d.		13	4
1 lb. 1 lb.	$1\frac{1}{2}$ lb.	5 lb. $\frac{1}{2}$ lb. $\frac{1}{2}$ lb.	15 lb. at $3\frac{1}{2}d.$ 16 $\frac{1}{2}$ lb. at $1\frac{1}{2}d.$ 7 lb. at 5d. 2 lb. at 1s.	4	5	2
		$\frac{1}{2}$ lb.		2	11	0
8 pt.	6 pt.	2 pt. + 1 pt. 4	$\frac{1}{2}$ lb. at 1s. 27 pt. at 4d. gal. 14 at 1s. 4d. doz.		6	1
	4 lb. 4 lb. 4 lb.		8 lb. at 3d. 8 lb. at $1\frac{1}{2}d.$ 8 lb. at $1\frac{1}{2}d.$ 10 lb. at 5d.	2	0	1
	Oranges. 100 at 1d. 8s. 4d.			1	0	0
4 lb.			10 lb. at 8d. 6 lb. at 6d. $\frac{1}{2}$ lb. at 1s. 14 lb. at 6d.	4	2	7
				14	7	8
				3	0	0
				7	3	0
					0	
16	$\frac{1}{2}$ lb.	1 lb.	4 lb. at 6d. 16 at 5d.	2	0	6
		6 lb. 12 lb.	6 lb. at 8d. 12 lb. at $\frac{1}{2}d.$	4	0	9
				6	19	10

COSTING: ORPHANAGE

BEDTIME DRINK (MILK ACCOUNTED FOR)

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Cocoa	$\frac{3}{4}$ lb.	$\frac{3}{4}$ lb.	$\frac{3}{4}$ lb.	$\frac{3}{4}$ lb.
Sugar	$1\frac{1}{2}$ lb.	$1\frac{1}{2}$ lb.	$1\frac{1}{2}$ lb.	$1\frac{1}{2}$ lb.
Biscuits	3 lb.			

CATERING FOR 100: WINTER (cont.)

BEDTIME DRINK (MILK ACCOUNTED FOR)

<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Total</i>	£	s.	d.
$\frac{3}{4}$ lb.	$\frac{3}{4}$ lb.	$\frac{3}{4}$ lb.	$5\frac{1}{4}$ lb. at 1s.		5	3
$1\frac{1}{2}$ lb.	$1\frac{1}{2}$ lb.	$1\frac{1}{2}$ lb.	$10\frac{1}{2}$ lb. at 2d.		1	9
			3 lb. at 10d.		2	6
					9	6

TOTAL COST PER WEEK FOR 100 CHILDREN

	£	s.	d.
Milk . . .	4	16	0
Breakfast . . .	7	9	4
Dinner . . .	11	15	0
High Tea . . .	6	19	10
Bedtime Drink . . .	9	6	
	£31	9	8

Approximate cost per head per week: 6s.

MENU FOR BOARDING-SCHOOL

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Coffee or milk Apples Porridge or cereal Ham Bread or rolls Butter Marmalade	Tea or milk Apricots Porridge or cereal Sardines on fried bread Bread or rolls Butter Marmalade	Tea or milk Oranges Porridge or cereal Fried eggs and tomatoes Bread or rolls Butter Syrup
11 o'clock	Milk or lemonade	Milk or lemonade	Milk or lemonade
Lunch	Roast chicken Potatoes, broad beans Stewed goose-berries and rice pudding Treacle tart Bread Water	Toad in the hole or mince Potatoes, carrots Strawberry flip French pudding Bread Water	Cold roast beef Potatoes, salad Steamed fruit pudding and custard Chocolate mould Bread Water
Tea	Tea or milk Brown and white bread and butter Jam Chocolate cake	Tea or milk Brown and white bread and butter Syrup Spice buns	Tea or milk Brown and white bread and butter Jam Scones
Supper	Fish salad Eccles cakes Bread Butter Water or milk	Pea soup Fish cakes Bread Apples Water or milk	Potato soup Stuffed eggs Beetroot Bread Water or milk

Average cost per

CATERING FOR 100 BOYS: SUMMER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Tea or milk Prunes Porridge or cereal Meat balls Bread or rolls Butter Honey	Tea or milk Bananas Porridge or cereal Sausages on fried bread Bread or rolls Butter Marmalade	Tea or milk Oranges Porridge or cereal Bacon and tomatoes Bread or rolls Butter Dripping	Tea or milk Apples Porridge or cereal Scrambled eggs on fried bread Bread or rolls Butter Syrup
Milk or lemonade	Milk or lemonade	Milk or lemonade	Milk or lemonade
Irish stew Potatoes, onions Beresford pudding Apricot rice Bread Water	Roast mutton Potatoes, broad beans Eve's pudding Macaroni pudding Bread Water	Fried fish Potatoes, tomatoes Date pudding and white sauce Rhubarb pie Bread Water	Boiled mutton Parsley sauce Potatoes, cabbage Gooseberry charlotte and custard Jam rolypoly Bread Water
Tea or milk Brown and white bread and butter Honey Date bread	Tea or milk Brown and white bread and butter Syrup Currant cake	Tea or milk Brown and white bread and butter Watercress Shrewsbury biscuits	Tea or milk Brown and white bread and butter Jam Coco-nut cake
Fish and tomato pie Chocolate lemon jelly Bread Oranges Water or milk	Mince and spaghetti Fried bread Cheese, butter, biscuits, watercress Bread Water or milk	Tomato soup Brawn and salad Bread Water or milk	Egg salad Cheese Strawberries and cream Bread Water or milk

head per week: 10s. 6d.

MENU FOR BOARDING-SCHOOL

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Coffee or milk Oranges Porridge Sausages on fried bread Bread or rolls Butter Marmalade	Tea or milk Prunes Porridge Scrambled eggs on fried bread Bread or toast Butter Syrup	Tea or milk Bananas Porridge Kedgeree Bread or toast Butter Marmalade
11 o'clock	Milk or cocoa	Milk or cocoa	Milk or cocoa
Lunch	Roast mutton, onion sauce Potatoes, cauliflower Fruit tart and custard Bananas in jelly Bread Water	Steak and kidney pudding Potatoes, cabbage Chocolate rice Apricot short-cakes Bread Water	Rolled stuffed steak or liver and bacon Potatoes, parsnips Treacle layer pudding Bread Water
Tea	Tea or milk Brown and white bread and butter Jam Scotch cake	Tea or milk Brown and white bread and butter Jam Raspberry buns	Tea or milk Brown and white bread and butter Syrup Scones
Supper	Veal mould Celery and beet-root salad Cheese, biscuits and butter Bread Water or milk	Brown vegetable soup Meat and potato casserole Oranges Bread Water or milk	Lentil soup Hot-pot Bread Water or milk

CATERING FOR 100 BOYS: WINTER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Tea or milk Oranges Porridge Bacon on fried bread Bread or toast Butter Jam	Tea or milk Apples Porridge Kidney on fried bread Bread or toast Butter Marmalade	Tea or milk Dried apricots Porridge Boiled eggs Bread or toast Butter Honey	Tea or milk Pears Porridge Bacon and potato rolls Bread or toast Butter Syrup
Milk or cocoa	Milk or cocoa	Milk or cocoa	Milk or cocoa
Boiled salt beef, dumplings Potatoes, mixed vegetables Railway pudding Apples and semolina Bread Water	Rabbit pie Potatoes, beet-root Apple trifle Bread and butter pudding Bread Water	Brown stew Potatoes, cabbage Date pudding and white sauce Macaroni pudding Bread Water	Roast beef, Yorkshire pudding Potatoes, sprouts Gooseberry charlotte and custard Bread Water
Tea or milk Brown and white bread and butter Honey Currant buns	Tea or milk Brown and white bread and butter Jam Scones	Tea or milk Brown and white bread and butter Honey Gingerbread	Tea or milk Brown and white bread and butter Jam Dripping cake
Cauliflower au gratin German tart and cream Toast Water or milk	Tomato soup. Shepherd's pie Bread Water or milk	Baked herrings (stuffed) Cheese and biscuits Bananas Bread and butter Water or milk	Potato soup Egg salad Toast Dates Water or milk

head per week: 10s. 6d.

MENU FOR BOARDING-SCHOOL

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Coffee or milk Grapefruit Cereal Home made meat paste Bread or rolls Butter Honey	Tea or milk Prunes Cereal Fried eggs on fried bread Bread or toast Butter Marmalade	Tea or milk Apples Cereal Bacon and tomatoes on fried bread Bread or toast Butter Syrup
11 o'clock	Milk or lemonade	Milk or lemonade	Milk or lemonade
Lunch	Roast stuffed veal Potatoes, broad beans Strawberry flan and cream Junket Bread Water	Cold veal and ham Potatoes, salad Steamed chocolate pudding Rice pudding Bread Water	Summer stew Potatoes, mixed vegetables Gooseberry charlotte & custard Ground rice mould Bread Water
Tea	Tea or milk Brown and white bread and butter Jam Iced lemon curd sandwich	Tea or milk Brown and white bread and butter Syrup Scones	Tea or milk Brown and white bread and butter Honey Rock buns
Supper	Egg and cheese salad Gooseberry fool Bread Butter Water or milk	Lentil soup Stuffed onions Toast Apples Water or milk	Eggs on spaghetti Brown sauce Strawberries and cream Bread Butter Water or milk

Average cost per

CATERING FOR 100 GIRLS: SUMMER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Tea or milk Oranges Cereal Kippers	Tea or milk Stewed apricots Cereal Ham	Tea or milk Bananas Cereal Scrambled egg on fried bread	Tea or milk Oranges Cereal Bacon and potato rolls. Fried bread
Bread or toast Butter Marmalade	Bread or toast Butter Honey	Bread or toast Butter Marmalade	Bread or toast Butter Syrup
Milk or lemonade	Milk or lemonade	Milk or lemonade	Milk or lemonade
Roast mutton Potatoes, cab - bage	Liver and bacon or baked chops Potatoes, beet- root	Steamed fish and egg sauce or macaroni cheese Potatoes, onions	Curry or hot pot Potatoes, cab - bage
Fruit salad and junket Jam tart	Canary pudding and jam sauce Tapioca pudding	Fruit tart and cream Honeycomb mould	Jellied trifle Semolina pud- ding
Bread Water	Bread Water	Bread Water	Bread Water
Tea or milk Brown and white bread and butter Jam Gingerbread	Tea or milk Brown and white bread and butter Watercress Quaker-oat fingers	Tea or milk Brown and white bread and butter Treacle Currant bread	Tea or milk Brown and white bread and butter Honey Scones
Beans on toast Cheese, biscuits and butter Oranges Water or milk	Cold stuffed tomatoes Potatoes Rhubarb cream Bread Water or milk	Pea soup Galantine beet- root Nuts and dates Bread Water or milk	Fish balls Fresh fruit salad Bread Butter Water or milk

head per week: 10s.

MENU FOR BOARDING-SCHOOL

	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Coffee or milk Oranges Porridge or cereal Boiled eggs Rolls or bread Butter Marmalade	Tea or milk Apples Porridge or cereal Bacon on fried bread Toast or bread Butter Syrup	Tea or milk Prunes Porridge or cereal Kidney on fried bread Toast or bread Butter Marmalade
11 o'clock	Milk or cocoa	Milk or cocoa	Milk or cocoa
Lunch	Roast mutton, red currant jelly Potatoes, cauliflower Baked apples and cream Macaroni pudding Bread Water	Mince and spaghetti Potatoes, carrots Steamed treacle pudding Rice pudding Bread Water	Stewed steak Potatoes, cabbage Banbury cakes Cornflour mould Bread Water
Tea	Tea or milk Brown and white bread and butter Honey Gingerbread	Tea or milk Brown and white bread and butter Jam Currant bread	Tea or milk Brown and white bread and butter Jam Scones
Supper	Galantine, salad Trifle Bread and butter Water or milk	Brown vegetable soup Scrambled egg and tomato Bread and butter Nuts and dates Water or milk	Cauliflower au gratin Fruit in jelly and cream Toast Water or milk

CATERING FOR 100 GIRLS: WINTER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Tea or milk Oranges Porridge or cereal Ham	Tea or milk Bananas Porridge or cereal Haddock	Tea or milk Dried fruit salad Porridge or cereal Sausages on fried bread	Tea or milk Apples Porridge or cereal Scrambled eggs
Toast or bread Butter Dripping	Toast or bread Butter Marmalade	Toast or bread Butter Honey	Toast or bread Butter Syrup
Milk or cocoa	Milk or cocoa	Milk or cocoa	Milk or cocoa
Ragout of veal Potatoes, sprouts Fruit tart and cream Ratafias custard Bread Water	Roast beef Yorkshire pudding Potatoes, parsnips Treacle tart Stewed fruit and junket Bread Water	Fish in batter Potatoes, onions Canary pudding and jam sauce Ground rice pudding Bread Water	Hot pot or liver and bacon Potatoes, beet-root Cabinet pudding Tapioca pudding Bread Water
Tea or milk Brown and white bread and butter Honey Soda cake	Tea or milk Brown and white bread and butter Syrup Shortbread	Tea or milk Brown and white bread and butter Watercress Jam sandwich	Tea or milk Brown and white bread and butter Jam Scones
Fish cakes Apples Bread and butter Water or milk	Potato soup Egg and cheese salad Honeycomb mould Bread Water or milk	Shepherd's pie Biscuits, cheese, and butter Oranges	Fricassée of fish Baked potatoes Apricot genoese Bread Water or milk

head per week: 10s.

ANALYSIS OF MENU FOR GIRLS' SCHOOL

<i>Ingredient</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Milk, for the whole day, except cooking	12½ gallons	12½ gallons	12½ gallons	12½ gallons

BREAKFAST

Rolls	9 doz.			
Bread:				
brown and white	6 lb.	18 lb.	18 lb.	18 lb.
Butter	5 lb.	5 lb.	5 lb.	5 lb.
Cereal	6 pkt.	6 pkt.	6 pkt.	6 pkt.
Sugar	6 lb.	6 lb.	6 lb.	6 lb.
Tea		½ lb.	½ lb.	½ lb.
Coffee	2 lb.			
Fruit	Grapefruit. 50 at 3d. 12s. 6d.	Prunes. 9 lb. at 7d. 5s. 3d.	Apples. 100 at ¾d. 6s. 3d.	Oranges. 100 at 1d. 8s. 4d.
Marmalade		6 lb.		6 lb.
Honey	6 lb.			
Syrup			6 lb.	
Home-made paste	3 lb.			
Eggs		8½ doz.		
Bacon			9 lb.	
Kippers				100
Tomatoes			6 lb.	
Ham				
Potatoes				
Dripping		4 lb.	4 lb.	

CATERING FOR 100: SUMMER

<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Total</i>	£	s.	d.
12½ gallons	12½ gallons	12½ gallons	87½ gal. at 1s. 8d.	7	5	10

BREAKFAST

			9 doz. at 10d. doz.		7	6
18 lb.	18 lb.	18 lb.	114 lb. at 2d.		19	0
5 lb.	5 lb.	5 lb.	35 lb. at 11d.	1	12	1
6 pkt.	6 pkt.	6 pkt.	42 pkt. at 5d.		17	6
6 lb.	6 lb.	6 lb.	42 lb. at 2½d.		8	9
½ lb.	½ lb.	½ lb.	3 lb. at 1s. 8d.		5	0
			2 lb. at 1s. 9d.		3	6
Apricots. 8 lb. at 9d. 6s.	Bananas. 100 at ¾d. 6s. 3d.	Oranges. 100 at 1d. 8s. 4d.		2	12	11
	6 lb.		18 lb. at 3½d.		5	3
6 lb.			12 lb. at 10d.		10	0
		6 lb.	12 lb. at 5d.		5	0
			3 lb. at 1s. 6d.		4	6
	6½ doz.		15 doz. at 1s. 3d.		18	9
		7 lb.	16 lb. at 1s.		16	0
			100 at 1½d.		12	6
			6 lb. at 6d.		3	0
10 lb.			10 lb. at 1s. 3d.		12	6
	4 lb.	10 lb.	10 lb. at ¾d.			8
		4 lb.	16 lb. at 6d.		8	0
				12	2	5

ANALYSIS OF MENU FOR GIRLS' SCHOOL LUNCH

<i>Ingredient</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Meat or Fish	50 lb. leg of veal at 1s. 4d. £3 6s. 8d.	Veal from Sunday 16 lb. ham at 1s. 3d. £1	30 lb. middle neck of mutton at 6d. 15s.	8 lb. liver at 1s. 4 lb. bacon at 1s. 15 lb. chops at 10d. £1 4s. 6d.
Potatoes	35 lb.	30 lb.	30 lb.	30 lb.
Cabbage				30 lb.
Broad beans	50 lb.			
Tomatoes		8 lb.		
Beetroot				
Onions			6 lb.	
Turnips			4 lb.	
Carrots			6 lb.	
Peas			10 lb.	
Lettuce		20		
Cucumber		4		
Watercress		2 lb.		
Macaroni				
Cheese				
Milk	10 pt. whole 6 pt. skim	4 + 12 pt. skim	10 pt. whole 6 pt. skim	20 pt. whole
Flour	$\frac{3}{4}$ lb. + 3 lb.	5 lb. + $\frac{1}{4}$ lb.		2 lb.
Margarine	$\frac{3}{4}$ lb. + $\frac{1}{2}$ lb. + 1 lb.	$\frac{1}{2}$ lb. + 4 lb. + $\frac{1}{2}$ lb.		$\frac{1}{2}$ lb.
Lard	1 lb.			$\frac{1}{2}$ lb.
Sugar	3 lb.	4 lb. + $\frac{1}{2}$ lb. + $\frac{1}{2}$ lb.	6 lb. + 1 lb. + $\frac{1}{2}$ lb.	2 lb.

CATERING FOR 100: SUMMER (cont.)

LUNCH

Thursday	Friday	Saturday	Total	£	s.	d.
30 lb. leg of mutton at 9d.	16 lb. cod at 6d.	25 lb. stewing steak at 8d.				
£1 2s. 6d.	8s.	16s. 8d.		8	13	4
35 lb.	30 lb.	30 lb.	220 lb. at $\frac{3}{4}d.$		13	9
		30 lb.	60 lb. at $1\frac{1}{2}d.$		7	6
			50 lb. at 1d.		4	2
			8 lb. at 6d.		4	0
24 lb.			24 lb. at 2d.		4	0
	25 lb.	6 lb.	37 lb. at $1\frac{1}{2}d.$		3	9
			4 lb. at $1\frac{1}{2}d.$			6
			6 lb. at $1\frac{1}{2}d.$			9
			10 lb. at 2d.		1	8
			20 at 2d.		3	4
			4 at 4d.		1	4
			2 lb. at 6d.		1	0
	$1\frac{1}{4}$ lb.		$1\frac{1}{4}$ lb. at 8d.			10
	3 lb.		3 lb. at 8d.		2	0
	10 pt. whole		$6\frac{1}{2}$ gal. at 1s. 8d.		10	5
12 pt. skim	4 + 8 pt. skim	22 pt. skim	$9\frac{1}{2}$ gal. at 2d.		1	7
5 lb.	$\frac{3}{4} + \frac{1}{2} + 4$ lb.	4 lb.	$25\frac{1}{2}$ lb. at $1\frac{3}{4}d.$		3	8
4 lb. + $\frac{1}{2}$ lb.	$\frac{3}{4}$ lb. + $\frac{1}{2}$ lb. + 1 lb.	$\frac{1}{2}$ lb. + $\frac{1}{2}$ lb.	$15\frac{1}{2}$ lb. at 5d.		6	6
	1 lb.		$2\frac{1}{2}$ lb. at 7d.		1	6
4 lb. + $\frac{1}{2}$ lb.	7 lb. + 1 lb.	1 lb. + $\frac{1}{2}$ lb.	$31\frac{1}{2}$ lb. at $2\frac{1}{2}d.$		6	7
			Carried forward	12	12	2

ANALYSIS OF MENU FOR GIRLS' SCHOOL

LUNCH (cont.)

<i>Ingredient</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Eggs		18		
Baking powder		4 oz.		
Chocolate powder		1 lb. + $\frac{1}{4}$ lb.		
Cream, re-constituted	6 pt.			
Rennet	$\frac{1}{2}$ bottle			$\frac{1}{2}$ bottle
Rice and tapioca		1 $\frac{1}{2}$ lb.		
Gooseberries			20 lb.	4 lb.
Bread	4 lb.	4 lb.	4 lb. + 8 lb.	4 lb.
Suet			6 lb.	
Custard powder			$\frac{1}{2}$ lb.	
Ground rice			1 $\frac{1}{2}$ lb.	
Oranges				18
Apples				4 lb.
Bananas				18
Tinned fruit				8 tins
Cherries				4 lb.
Jam				4 lb.
Lemons				
Cornflour				
Gelatine				
Jellies				
Sponge cakes				
Semolina				

CATERING FOR 100: SUMMER (cont.)

LUNCH (cont.)

Thursday	Friday	Saturday	Total	£	s.	d.
18	12	10	Brought forward	12	12	2
4 oz.			58 at 1s. 3d. doz.		6	0
			$\frac{1}{2}$ lb. at 1s.			6
			$1\frac{1}{4}$ lb. at 1s.		1	3
	6 pt.	4 pt.	16 pt. at 8d.	10		8
			$\frac{3}{4}$ bottle at 1s.			9
$1\frac{1}{2}$ lb.			$2\frac{1}{2}$ lb. at 3d.			8
	24 lb.		48 lb. at $1\frac{1}{2}d.$		6	0
4 lb.	4 lb.	4 lb.	36 lb. at 2d.		6	0
			6 lb. at 10d.		5	0
			$\frac{1}{2}$ lb. at 1s.			6
			$1\frac{1}{4}$ lb. at 4d.			5
			18 at 1d.		1	6
			4 lb. at 4d.		1	4
			18 at 10d. doz.		1	3
			8 tins at 8d.		5	4
2 lb.			4 lb. at 6d.		2	0
6			6 lb. at $3\frac{1}{2}d.$		1	9
$\frac{1}{2}$ lb.			6 at 1d.			6
			$\frac{1}{4}$ lb. at 9d. lb.			2
	$\frac{3}{4}$ lb.		$\frac{3}{4}$ lb. at 1s.			9
		12	12 at $3\frac{1}{2}d.$		3	6
		5 doz.	5 doz. at 10d. doz.		4	2
		$1\frac{1}{4}$ lb.	$1\frac{1}{4}$ lb. at 5d.			6
				15	12	8

ANALYSIS OF MENU FOR GIRLS' SCHOOL

TEA

<i>Ingredient</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Bread : brown and white	22 lb.	22 lb.	22 lb.	22 lb.
Butter	5 lb.	5 lb.	5 lb.	5 lb.
Currant bread				
Tea	$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.
Sugar	3 lb. + $2\frac{1}{2}$ lb. + 1 lb.	3 lb. + $\frac{1}{2}$ lb.	3 lb. + 2 lb.	3 lb. + 2 lb.
Milk (cook- ing only)	$\frac{1}{2}$ pt.	2 pt.	1 pt.	2 pt.
Jam	6 lb.			6 lb.
Syrup		6 lb.		9 lb. (black)
Flour	$4\frac{1}{2}$ lb.	6 lb.	6 lb.	6 lb.
Margarine	$2\frac{1}{2}$ lb. + 1 lb.	1 lb.	2 lb.	3 lb.
Lard				2 lb.
Eggs	18 + 4		6	6
Icing sugar	$2\frac{1}{2}$ lb.			
Currants			1 lb.	
Sultanas			1 lb.	
Peel			$\frac{1}{2}$ lb.	
Ginger or spice			2 oz.	4 oz.
Quaker oats				
Watercress				
Raising agent	$\frac{1}{4}$ lb.	$\frac{1}{2}$ lb.	$\frac{1}{4}$ lb.	$\frac{1}{4}$ lb.
Lemons	6			
Honey			6 lb.	

CATERING FOR 100: SUMMER (cont.)

TEA

Thursday	Friday	Saturday	Total	£	s.	d.
22 lb.	18 lb.	22 lb.	150 lb. at 2d.	1	5	0
5 lb.	5 lb.	5 lb.	35 lb. at 11d.	1	12	1
	12 lb.		12 lb. at 2½d.		2	6
½ lb.	½ lb.	½ lb.	3½ lb. at 1s. 8d.		5	10
3 lb. + 1 lb.	3 lb.	3 lb. + ½ lb.	30½ lb. at 2½d.		6	4
		2 pt.	1 gallon at 2d.			2
			12 lb. at 3½d.		3	6
1 lb.	6 lb.		22 lb. at 5d.		9	2
		6 lb.	28½ lb. at 1½d.		4	2
1 lb.		1 lb.	8½ lb. at 5d.		3	7
			2 lb. at 7d.		1	2
			34 at 1s. 3d. doz.		3	7
			2½ lb. at 4d.			10
			1 lb. at 5d.			5
		1 lb.	2 lb. at 6d.		1	0
			½ lb. at 8d.			4
			6 oz. at 1s. lb.			5
4 lb.			4 lb. at 4d.		1	4
6 lb.			6 lb. at 6d.		3	0
		½ lb.	13 lb. at 1s.		1	9
			6 at 1d.			6
		6 lb.	12 lb. at 10d.		10	0
				5	16	8

ANALYSIS OF MENU FOR GIRLS' SCHOOL

SUPPER

<i>Ingredient</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Eggs	50		100	
Cheese	4 lb.			4 lb.
Lettuce	20			
Tomatoes	6 lb.			
Peas	8 lb.			
Cress	2 lb.			
Potatoes	8 lb.			
Gooseberries	20 lb.			
Sugar	4 lb. + 1 lb.		3 lb.	
Milk (for cooking)	6 pt. whole 6 pt. skim	10 pt. skim		
Custard powder	$\frac{3}{4}$ lb.			
Cream, re-constituted	4 pt.		6 pt.	
Lentils		3 $\frac{1}{2}$ lb.		
Onions		25 lb.	1 lb.	1 lb.
Carrots		2 lb.	1 lb.	1 lb.
Turnips			1 lb.	1 lb.
Flour		1 $\frac{1}{4}$ lb. + $\frac{1}{4}$ lb.	$\frac{1}{4}$ lb.	$\frac{1}{2}$ lb.
Meat, etc.		6 lb. minced beef		
Apples		100		
Spaghetti			3 lb.	
Tomato purée				2 tins

CATERING FOR 100: SUMMER (cont.)

SUPPER

Thursday	Friday	Saturday	Total	£	s.	d.
	4	6	160 at 1s. 3d. doz.	16	8	
			8 lb. at 8d.	5	4	
6			26 at 2d.	4	4	
20 lb.			26 lb. at 6d.	13	0	
	12 lb.		20 lb. at 2d.	3	4	
			2 lb. at 8d.	1	4	
20 lb.		16 lb.	44 lb. at $\frac{3}{4}$ d.	2	9	
		6 lb.	26 lb. at $1\frac{1}{2}$ d.	3	3	
8 lb.		2 lb.	18 lb. at $2\frac{1}{4}$ d.	3	9	
6 pt. skim	10 pt. skim		6 pt. at 1s. 8d. gal.	1	3	
			4 gallons at 2d.		8	
$\frac{1}{2}$ lb.			$1\frac{1}{4}$ lb. at 1s.	1	3	
6 pt.			16 pt. at 8d.	10	8	
			$3\frac{1}{2}$ lb. at 3d.		10	
	2 lb.		29 lb. at $1\frac{1}{2}$ d.	3	8	
	1 lb.		5 lb. at $1\frac{1}{2}$ d.		8	
	1 lb.		3 lb. at $1\frac{1}{2}$ d.		5	
	$1\frac{1}{4}$ lb.		$3\frac{1}{2}$ lb. at $1\frac{3}{4}$ d.		6	
	10 lb. minced beef		16 lb. at 8d.	10	8	
		12	112 at $\frac{3}{4}$ d.	7	0	
			3 lb. at 10d.	2	6	
			2 tins at 1s.	2	0	
			Carried forward	4	15	10

ANALYSIS OF MENU FOR GIRLS' SCHOOL

SUPPER (cont.)

<i>Ingredient</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Strawberries			20 lb.	
Haricot beans				4 lb.
Bacon				1 lb.
Biscuits				3 lb.
Oranges				100
Cooked salad dressing				
Rhubarb				
Beetroot				
Oil				
Vinegar				
Nuts, mixed and shelled				
Dates				
Cod				
Anchovy essence				
Tinned fruit				
Raspberries				
Bread	8 lb.	8 lb.	8 lb.	8 lb.
Butter	3 lb.		3 lb.	3 lb.

TOTAL COST PER WEEK

Approximate cost per

CATERING FOR 100: SUMMER (cont.)

SUPPER (cont.)

Thursday	Friday	Saturday	Total	£	s.	d.
			Brought forward	4	15	10
		5 lb.	25 lb. at 6d.		12	6
			4 lb. at 3d.		1	0
			1 lb. at 1s.		1	0
			3 lb. at 10d.		2	6
		12	112 at 1d.		9	4
3 pt.			3 pt. at 10d.		2	6
20 lb.			20 lb. at 1½d.		2	6
	12 lb.		12 lb. at 2d.		2	0
	½ bottle		½ bot. at 3s. 4d.		1	8
	1 pt.		1 pt. at 10d.			10
	3 lb.		3 lb. at 1s. 8d.		5	0
	6 lb.		6 lb. at 6d.		3	0
		8 lb.	8 lb. at 6d.		4	0
		½ bottle	½ bot. at 1s. 4d.			4
		6 tins	6 tins at 8d.		4	0
		4 lb.	4 lb. at 6d.		2	0
8 lb.	8 lb.	8 lb.	56 lb. at 2d.		9	4
		3 lb.	12 lb. at 11d.		11	0
				8	10	4

FOR 100 GIRLS: £49 7s. 11d.

head per week: 10s. 0d.

MENU FOR RESIDENTIAL CLUB

<i>Meal</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Breakfast	Grape fruit or orange juice Stewed prunes or apples Porridge or cereals Bacon and eggs Haddock Boiled eggs on demand Toast, rolls, Ryvita Butter Marmalade or honey Tea or coffee	Grape fruit or orange juice Stewed prunes or apples Porridge or cereals Bacon and mushrooms Scrambled egg and tomato Boiled eggs on demand Toast, rolls, Ryvita Butter Marmalade or honey Tea or coffee	Grape fruit or orange juice Stewed prunes or apples Porridge or cereals Grilled kidney and sausages Kippers Boiled eggs on demand Toast rolls, Ryvita Butter Marmalade or honey Tea or coffee
Lunch	Scotch broth Roast chicken etc., or cheese soufflé Potatoes roast or boiled Brussels sprouts Parsnips Fruit tart and cream or lemon sponge and custard Cheese and biscuits Coffee	Pea soup Fricassée of chicken or cold roast beef or lentil cutlets Potatoes, baked in jackets, or boiled or mashed Cabbage or salad Beresford pudding or stewed plums and rice pudding Cheese and biscuits Coffee	Tomato soup Collops and rice or steak and kidney pudding or eggs au gratin Potatoes, boiled or mashed Cabbage or carrots Cabinet pudding or macaroni pudding and baked apples Cheese and biscuits Coffee

CATERING FOR 100 RESIDENTS: WINTER

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Grape fruit or orange juice	Grape fruit or orange juice	Grape fruit or orange juice	Grape fruit or orange juice
Stewed prunes or apples	Stewed prunes or apples	Stewed prunes or apples	Stewed prunes or apples
Porridge or cereals	Porridge or cereals	Porridge or cereals	Porridge or cereals
Bacon and tomatoes	Ham	Sausages and bacon	Bacon and eggs
Omelets	Kedgeriee	Poached eggs	Fish cakes
Boiled eggs on demand	Boiled eggs on demand	Boiled eggs on demand	Boiled eggs on demand
Toast, rolls, Ryvita	Toast, rolls, Ryvita	Toast, rolls, Ryvita	Toast, rolls, Ryvita
Butter	Butter	Butter	Butter
Marmalade or honey	Marmalade or honey	Marmalade or honey	Marmalade or honey
Tea or coffee	Tea or coffee	Tea or coffee	Tea or coffee
Onion soup	Lentil soup	Mutton broth	Tomato soup
Mixed grill or fish au gratin	Ragout of veal or cheese pudding	Hot pot or fried fillets of plaice	Beef olives or fried steak and onions or macaroni
Potatoes, boiled or chipped	Potatoes, mashed or baked in jackets	Potatoes, mashed, boiled, or chipped	Potatoes, boiled or mashed
Beetroot or brussels sprouts	Leeks or cabbage	Brussels sprouts or baked tomatoes	Cabbage or parsnips
Lemon curd tart or junket and fruit salad	Apple charlotte or prune mould and custard	Gooseberry amber or ground rice pudding and figs	Chocolate pudding and sauce
Cheese and biscuits	Cheese and biscuits	Cheese and biscuits	Oranges in jelly and cream
Coffee	Coffee	Coffee	Cheese and biscuits
			Coffee

MENU FOR RESIDENTIAL CLUB

<i>Meal</i>	<i>Sunday</i>	<i>Monday</i>	<i>Tuesday</i>
Tea	Bread and butter and jam Scones Cake — Victoria sandwich Tea	Bread and butter and jam Tomato sand-wiches Petits fours Tea	Bread and butter and jam Toast Gingerbread Tea
Dinner (supper on Sunday evening)	Veal galantine or egg and tomato flan Orange cream or Chinese tart Cheese and biscuits Coffee	Chestnut soup Fried whiting and tomato sauce Roast mutton, etc., or egg and nut cutlets Potatoes, roast or mashed Cauliflower or braised leeks Caramel custard or vanilla ice and hot chocolate sauce, or cheese and biscuits Coffee	Chicken broth Lobster salad Roast veal, etc., or mushroom fricassée Potatoes, roast or boiled Spinach or artichokes Pineapple soufflé Fruit in jelly and cream Sardine savouries Coffee

Approximate cost for

CATERING FOR 100 RESIDENTS: WINTER (cont.)

<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Bread and butter and jam	Bread and butter and jam	Bread and butter and jam	Bread and butter and jam
Scones	Toasted teacake	Egg and cress sandwiches	Toast
Scotch cake	Petits fours	Coffee cake	Shortbread
Tea	Tea	Tea	Tea
Cucumber soup	Clear tomato soup	Cauliflowersoup	Artichoke soup
Fish cream (hot)	Fried fillets of sole and tar- tare sauce	Salmon mayon- naise	Grilled trout
Boiled tongue or cheese flan	Roast beef, etc., or nut roast	Cutlets or vege- tarian pie	Boiled mutton and capersauce or mixed grill or cheese soufflé
Potatoes, boiled or mashed	Potatoes, roast or boiled	Potatoes, mashed or boiled	Potatoes, boiled or mashed
Cabbage or braised carrots	Cauliflower or beetroot	Tinned peas or cabbage	Carrots, onions, spinach
French pudding or meringues	Viennoise pud- ding or apricot ice cream	Duchesse pud- ding or fruit salad and cream	Treacle sponge or jubilee pud- ding
Celery creams	Cheese and bis- cuits	Anchovy boats	Cheese and bis- cuits
Coffee	Coffee	Coffee	Coffee

food: 15/- per head.

MENU FOR MEN'S HALL OF RESIDENCE

<i>Meal</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Breakfast	Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Stewed figs Sardines on toast	Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Apples Bacon and fried potatoes	Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Gooseberries Sausages
Lunch			
Tea	Bread Butter Jam Tea or milk Coco-nut cake	Bread Butter Jam Tea or milk Ginger biscuits	Bread Butter Jam Tea or milk Scones
Dinner	Pea soup Ragout of beef Potatoes Cabbage Iced bakewell tart or trifle Cheese	Scotch broth Roast lamb, etc. Potatoes Onions Fruit pie and cream Cheese	Potato soup Salmon mayon- naise Potatoes in skins Salad Lemon curd pie Cheese

Total cost per week for 75 men: £34 14s. od.

CATERING FOR 75 (AVERAGE): SUMMER

<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Oranges Fried eggs	Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Stewed prunes Kedgeriee	Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Bananas Meat balls	Porridge or Force Milk Sugar Tea or coffee Toast, etc. Marmalade Apples Ham
			Roast beef, York- shire pudding Potatoes Greens Jam tart
Bread Butter Jam Tea or milk Fruit cake	Bread Butter Jam Tea or milk Jam sandwich	Bread Butter Jam Tea or milk Savoury scones	Bread Butter Jam Tea or milk Scotch cake
Grapefruit Rolled stuffed steak Potatoes Carrots Pineapplesoufflé Cheese	Tomato soup Eggs au gratin or liver and bacon Potatoes Onions Treacle layer pudding Cheese	Beetroot soup Steak and kid- ney pie Potatoes Cabbage Lemon mould or rhubarb trifle Cheese	Cold salt beef Salad Potatoes baked in skins Biscuits, butter, and cheese Cheese

Approximate cost per head per week: 9s. 3d.

MENU FOR MEN'S HALL OF RESIDENCE

<i>Meal</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Breakfast	Porridge Milk Sugar Toast Butter Marmalade Apples Bacon, fried potatoes	Porridge Milk Sugar Toast Butter Marmalade Stewed prunes Meat balls	Porridge Milk Sugar Toast Butter Marmalade Oranges Scrambled eggs
Lunch			
Tea	Bread Butter Jam Tea or milk Currant cake	Bread Butter Jam Tea or milk Scones	Bread Butter Jam Tea or milk Oatmeal biscuits
Dinner	Tomato soup Roast beef, Yorkshire pudding Roast potatoes Onions Date pudding and sauce Cheese	Potato soup Brown stew Potatoes Sprouts Sardine savoury Cheese	Lentil soup Baked, stuffed hake steaks Potatoes baked in their skins Carrots German apple tart Cheese

Average cost: 9s. 3d. per head

CATERING FOR 75 (AVERAGE): WINTER

<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
Porridge Milk Sugar Toast Butter Marmalade Stewed figs Kidney on fried bread	Porridge Milk Sugar Toast Butter Marmalade Bananas Boiled eggs	Porridge Milk Sugar Toast Butter Marmalade Stewed apricots Haddock	Porridge Milk Sugar Toast Butter Marmalade Apples Sausages
			Meat pudding Potatoes Cabbage Treacle tart
Bread Butter Jam Tea or milk Spice cake	Bread Butter Jam Tea or milk Gingerbread	Bread Butter Jam Tea or milk Scones	Bread Butter Jam Tea or milk Walnut cake
Celery and potato soup Roast pork Stuffing Apple sauce Potatoes Greens Apricot creams, or Canadian moulds Cheese	Cauliflower soup Fried fish or rabbit in casserole Potatoes Onions Eve's pudding Cheese	Mutton broth Boiled salt beef, dumplings Potatoes Mashed turnips Baked apples and cream Cheese	Cold beef roll and mixed vegetable salad Potatoes baked in skins Cheese and biscuits Butter

lunch on Sunday only)

COSTING: MEN'S HALL OF RESIDENCE

BREAKFAST

<i>Ingredients</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>
Porridge— oatmeal	3 lb.	3 lb.	3 lb.	3 lb.
Fruit	75 apples 5s.	7 lb. prunes 4s. 1d.	75 oranges 6s. 3d.	7 lb. figs 4s. 8d.
Bread	18 lb.	18 lb.	18 lb.	18 lb.
Butter	4 lb.	4 lb.	4 lb.	4 lb.
Tea	$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.	$\frac{1}{2}$ lb.
Coffee	1 $\frac{1}{4}$ lb.	1 $\frac{1}{4}$ lb.	1 $\frac{1}{4}$ lb.	1 $\frac{1}{2}$ lb.
Marmalade	4 $\frac{1}{2}$ lb.	4 $\frac{1}{2}$ lb.	4 $\frac{1}{2}$ lb.	4 $\frac{1}{2}$ lb.
Sugar	5 lb.	5 lb.	5 lb.	5 lb.
Milk	3 $\frac{1}{2}$ gallons	3 $\frac{1}{2}$ gallons	3 $\frac{1}{2}$ gallons	3 $\frac{1}{2}$ gallons
Bacon	7 lb.			
Cold meat		8 lb.		
Potatoes	10 lb.	10 lb.		
Kidney				9 lb.
Fish				
Sausages				
Eggs			5 doz.	
Dripping	3 lb.	3 lb.	3 lb.	3 lb.
Margarine			$\frac{1}{2}$ lb.	

CATERING FOR 75 (AVERAGE): WINTER

BREAKFAST

<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>	<i>Total</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
3 lb.	3 lb.	3 lb.	21 lb. at 2½ <i>d.</i>		4	5
75 bananas 5 <i>s.</i> 3 <i>d.</i>	6 lb. apricots 4 <i>s.</i> 6 <i>d.</i>	75 apples 5 <i>s.</i>		1	14	10
18 lb.	18 lb.	18 lb.	126 lb. at 2 <i>d.</i>	1	1	0
4 lb.	4 lb.	4 lb.	28 lb. at 1 <i>s.</i>	1	8	0
½ lb.	½ lb.	½ lb.	3½ lb. at 1 <i>s.</i> 8 <i>d.</i>		5	10
1½ lb.	1¼ lb.	1¼ lb.	8¾ lb. at 1 <i>s.</i> 9 <i>d.</i>	15	4	
4½ lb.	4½ lb.	4½ lb.	31½ lb. at 3½ <i>d.</i>		9	3
5 lb.	5 lb.	5 lb.	35 lb. at 2½ <i>d.</i>		7	4
3½ gallons	3½ gallons	3½ gallons	24½ gallons at 2 <i>s.</i>	2	9	0
			7 lb. at 1 <i>s.</i>		7	0
			8 lb. from pre- vious day			
			20 lb. at ¾ <i>d.</i>		1	3
			9 lb. at 9 <i>d.</i>		6	9
	12 lb. smoked fillets		12 lb. at 8 <i>d.</i>		8	0
		12 lb.	12 lb. at 6 <i>d.</i>		6	0
			5 doz. at 1 <i>s.</i> 4 <i>d.</i>			
6½ doz.			6¼ doz. at 2 <i>s.</i>	19	2	
		3 lb.	15 lb. at 6 <i>d.</i>		7	6
	½ lb.		1 lb. at 5 <i>d.</i>			5
				11	10	2

COSTING: MEN'S HALL OF RESIDENCE (cont.)

TEA

<i>Ingredients</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>
Bread	16 lb.	16 lb.	16 lb.	16 lb.
Butter	4 lb.	5 lb.	4 lb.	4 lb.
Jam	5 lb.	6 lb.	5 lb.	5 lb.
Tea	1 lb.	1 lb.	1 lb.	1 lb.
Milk	2 gallons	2 gallons	2 gallons	2 gallons
Sugar	6 lb.	4 lb.	4 lb.	6 lb.
Flour	6 lb.	5 lb.	2 lb.	6 lb.
Margarine	3 lb.	1½ lb.	1 lb.	3 lb.
Raising agent	6 oz.	10 oz.	4 oz.	6 oz.
Currants	3 lb.			
Oatmeal			2 lb.	
Spice or Ginger				8 oz.
Treacle				
Eggs	6			6
Walnuts				

DINNER

(Six weekdays. Sunday: midday dinner and supper)

<i>Ingredients</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>
Meat	40 lb. sirloin at 9d. (part for Tuesday breakfast)	26 lb. steak at 8d.	80 cutlets of hake at 4d.	30 lb. leg of pork at 1s.
Potatoes	£1 10s. 25 lb.	17s. 4d. 30 lb.	£1 6s. 8d. 25 lb.	£1 10s. 28 lb.
Cabbage				20 lb.
Sprouts		20 lb.		
Onions	20 lb.	8 lb.	2 lb.	
Carrots	2 lb.	6 lb.	20 lb.	
Turnips		5 lb.	2 lb.	
Tomatoes	3 tins purée			
Beetroot				
Celery		1 head		6 heads

CATERING FOR 75 (AVERAGE): WINTER

TEA

<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>	<i>Total</i>	£	s.	d.
16 lb.	16 lb.	16 lb.	112 lb. at 2d.		18	8
4 lb.	5 lb.	4 lb.	30 lb. at 1s.	1	10	0
5 lb.	6 lb.	5 lb.	37 lb. at 3½d.		10	10
1 lb.	1 lb.	1 lb.	7 lb. at 1s. 8d.		11	8
2 gallons	2 gallons	2 gallons	14 gallons at 2s.	1	8	0
5 lb.	4 lb.	6 lb.	35 lb. at 2½d.		7	4
6 lb.	5 lb.	6 lb.	36 lb. at 1½d.		5	3
2 lb.	1½ lb.	3 lb.	15 lb. at 5d.		6	3
10 oz.	10 oz.	6 oz.	4½ lb. at 8d.		3	0
			3 lb. at 5d.		1	3
			2 lb. at 2½d.			5
			½ lb. at 1s.			6
7 lb. (black)		6	7 lb. at 4½d.	2	6	
		1 lb.	1½ doz. at 1s. 4d.	2	0	
			1 lb. at 1s. 8d.	1	8	
				6	9	2

DINNER

(Six weekdays. Sunday: midday dinner and supper)

<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>	<i>Total</i>	£	s.	d.
40 fillets fish at 5d.	10 lb. scrag at 4d.	22 lb. steak 14s. 8d.				
16s. 8d.	3s. 4d.	4 lb. kidney 3s.				
10 rabbits at 1s. 2d.	25 lb. silver- side at 9d.	16 lb. steak 10s. 8d.				
11s. 8d.	18s. 9d.	£1 8s. 4d.				
£1 7s. 4d.	£1 2s. 1d.	25 lb. + 25 lb.	205 lb. at ½d.	9	1	9
25 lb.	25 lb.	20 lb.	40 lb. at 1½d.		12	9
			20 lb. at 1½d.		5	0
20 lb.	8 lb.		58 lb. at 1½d.		7	3
3 lb.	8 lb.		39 lb. at 1½d.		7	3
3 lb.	24 lb.		34 lb. at 1½d.	4	11	
			3 tins at 1s.		4	3
		12	12 at 2d.		3	0
		6 heads	13 heads at 2½d.		2	0
			Carried forward	11	10	11

COSTING: MEN'S HALL OF RESIDENCE (cont.)

DINNER (contd.)

(Six weekdays. Sunday: midday dinner and supper)

Ingredients	Monday	Tuesday	Wednesday	Thursday
Apples			15 lb.	10 lb.
Cream, re-constituted				2 pt.
Milk	6 pt. + 6 pt. + 3 pt.	4 pt.	8 pt.	8 pt. + 4 pt.
Eggs	6			
Flour	6 lb. + 3 lb. + 1 lb.		1 lb. + 6 lb.	
Margarine		$\frac{1}{2}$ lb.	2 lb.	1 lb.
Sugar	3 lb.		3 lb.	4 lb.
Custard powder				8 oz.
Suet	3 lb.			
Dates	3 lb.			
Cheese	2 lb.	2 lb.	2 lb.	2 lb.
Butter	2 lb.	2 lb.	2 lb.	2 lb.
Biscuits				
Sardines		2 large tins		
Bread	4 lb.	4 lb. + 3 lb.	4 lb. + 2 lb.	4 lb. + 2 lb.
Lard			2 lb.	
Apricots				1 tin pulp
Cornflour				1 lb.
Gelatine				8 oz.
Salad oil				
Vinegar				
Raising agent	8 oz.			
Dripping	4 lb.	3 lb.		4 lb.
Lentils		4 lb.		
Spice			$\frac{1}{2}$ lb.	
Currants			2 lb.	
Herbs and sage				1 pkt.
Plums				2 large tins
Cauliflower				
Pearl barley				
Syrup				
Lemons				

Total cost (Breakfast £11 10s. 2d., Tea £6 9s. 2d., Dinner + Luncheon

CATERING FOR 75 (AVERAGE): WINTER

DINNER (contd.)

(Six weekdays. Sunday: midday dinner and supper)

Friday	Saturday	Sunday	Total	£	s.	d.
			Brought forward	11	10	11
15 lb.	25 lb.		65 lb. at 2d.		10	10
	3 pt.		5 pt. at 10d.		4	2
4 pt. + 2 pt. + 4 pt.			50 pt. separated at ½d.		2	1
6		6	1½ doz. at 1s. 4d.		2	0
6 lb. + 1 lb.	2 lb. + 1 lb.	6 lb. + 5 lb.	38 lb. at 1½d.		5	7
3 lb.		1½ lb.	8 lb. at 5d.		3	4
4 lb. + 2 lb.	4 lb.		20 lb. at 2½d.		4	2
	1 lb.	2½ lb.	½ lb. at 8d.			4
			6½ lb. at 10d.		5	5
			3 lb. at 6d.		1	6
2 lb.	2 lb.	3 lb.	15 lb. at 8d.		10	0
2 lb.	2 lb.	3 lb.	15 lb. at 1s.		15	0
		3 lb.	3 lb. at 10d.		2	6
			2 tins at 1s. 4d.		2	8
4 lb. + 1 lb.	4 lb.	4 lb. + 4 lb. + 4 lb.	44 lb. at 2d.		7	4
		1 lb.	3 lb. at 7d.		1	9
			1 tin at 2s. 4d.		2	4
			1 lb. at 9d.			9
			½ lb. at 1s.			6
		½ bottle	½ bottle at 3s. 4d.		1	8
		1 pt.	1 pt. at 10d.			10
8 oz.		4 oz.	1½ lb. at 8d.			10
4 lb.			15 lb. at 6d.		7	6
			4 lb. at 4d.		1	4
			½ lb. at 1s.			6
			2 lb. at 5d.			10
			1 pkt. at 3d.			3
			2 tins at 1s. 4d.		2	8
6			6 at 4d.		2	0
	1 lb.		1 lb. at 3d.			3
		6 lb.	6 lb. at 5d.		2	6
		4	4 at 1½d.			6
				16	14	8

on Sunday £16 14s. 8d.) £34 14s. 0d. Cost per head 9s.

MENU FOR WOMEN'S HALL OF RESIDENCE

<i>Meal</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Breakfast	Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Oranges Bacon and potato rolls	Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Stewed prunes Scrambled egg	Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Bananas Fish cakes
Lunch			
Tea	Bread Butter Jam Tea or milk Coco-nut cake	Bread Butter Jam Tea or milk Scones	Bread Butter Jam Tea or milk Sultana cake
Dinner	Roast veal Forcemeat balls Roast potatoes Cabbage Gooseberry cream Apple trifle Celery creams	Hot-pot Sprouts Spaghetti and tomato Flat apple tart and custard Cheese and bis- cuits	Celery soup Scotch eggs Tomato sauce Potatoes Parsnips Apple charlotte Cabinet pudding

Average cost per

CATERING FOR 75 (AVERAGE): WINTER

<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Stewed figs Bacon and tomatoes	Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Apples Boiled eggs	Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Dried fruit salad Ham	Porridge Milk Sugar Tea or coffee Toast Butter Marmalade Oranges Sausages
			Brown stew Potatoes Sprouts Treacle layer pudding
Bread Butter Jam Tea or milk Scones	Bread Butter Jam Tea or milk Cherry cake	Bread Butter Jam Tea or milk Gingerbread	Bread Butter Jam Tea or milk Jam sandwich
Roast lamb Onion sauce Roast potatoes Sprouts Semolina sponge Ginger cream Canapé à la russe	Tomato soup Fried fish sauce Potatoes Carrots Apricot short- cake Banana rolls	Grapefruit Meat pudding Potatoes Greens Honeycomb mould and cream	Veal moulds Celery and Beetroot salad Pineapple flans and creams

head per week: 8s. 3d.

APPROXIMATE REQUIREMENTS WHEN CATERING

<i>Equipment</i>	20	50	100
Size of room	200 sq. ft.	400 sq. ft.	600 sq. ft.
Cupboards for kitchen equipment and general stores. These cupboards would be divided into sections according to the space and the needs of the kitchen	Length 4 ft. Height 6 ft. Depth 2 ft.—recessed to 15 in. at top	Length 4 ft. Height 6 ft. Depth 2 ft.—recessed to 15 in. at top	Length 6 ft. Height 6 ft. Depth 2 ft.—recessed to 15 in. at top
		Cupboards below work table	Cupboards below work tables
Tables	1—5 ft. $\times$ 2½ ft.	1—6 ft. $\times$ 3 ft.	2—5 ft. $\times$ 3 ft.
Cooking apparatus	1 large stove, minimum six boiling rings, or storage heat cooker, house-hold size	2 large cookers, minimum six boiling rings, or storage heat cooker and a gas or electric stove	2 large stoves 1 vegetable boiler 1 steam oven 1 hot closet, or large size storage heat cooker
Mixing machines		Small table model	Large table model
Washing-up machine			Small size if possible
Bread machine			Hand model
Carving machine			
Chutes	Bins only	Chute for vegetable trimmings, etc. Bins for other rubbish	Chutes for each type of rubbish, either in kitchen or scullery

FOR 20, 50, 100, 250, 500, AND 1,000 PEOPLE

250	500	1,000
1,000 sq. ft.	1,500 sq. ft.	2,000 sq. ft.
Length 10 ft. Height 6 ft. Depth 2 ft.—recessed to 15 in. at top	Length 12 ft. Height 6 ft. Depth 2 ft.—recessed to 15 in. at top	Length 16 ft. Height 6 ft. Depth 2 ft.—recessed to 15 in. at top
Cupboards below work tables	Cupboards below work tables	Cupboards below work tables
3—7 ft. × 3 ft. 2 large gas or electric stoves 1 range of hot plates 1 baking oven 1 steam oven 2 vegetable boilers 1 jacketed boiler 1 large grill 1 or 2 hot closets, ac- cording to size and arrangements in servery	3—7 ft. × 3 ft. 2—5 ft. × 2½ ft. 3 large gas or electric stoves 2 ranges of hot plates 1 baking oven 1 roasting oven 2 steam ovens 2 very large or 4 medium vegetable boilers 2 jacketed boilers 2 grills 2 large hot closets 1 bain-marie	4—7 ft. × 3 ft. 2—5 ft. × 3 ft. 4 large stoves 3 ranges of hot plates 2 baking ovens 2 roasting ovens 3 steam ovens 4 very large vegetable boilers 3 grills 3 jacketed boilers 3 hot closets 1 large or 2 smaller bains-marie
Small floor model	Large floor model	Large floor model
Large model	Large model	2 large size models
Hand model	Electrically driven model	Electrically driven model
Hand machine	Electrically driven machine	Electrically driven machine
Chutes for each type of rubbish from scullery and kitchen	Chutes for each type of rubbish from scullery and kitchen	Chutes for each type of rubbish from scullery and kitchen

INDEX

INDEX

A

ACCOUNTS, 61
 Address book, 61
 Aga stove, 7
 Aluminium, 26
 Anthracite, 7
 Apparatus: cleaning, 66, 68,
 69; cooking, 8, 9, 10, 11, 12,
 164, 165; general, 14, 15, 16,
 17, 18; heaters, 12, 13, 14,
 17; labour-saving, 19, 20,
 21, 22, 23, 24, 164, 165;
 placing in kitchen, 72, 73,
 74, 78, 82, 86; small, 25, 26,
 27, 28, 29
 Asbestos, glazed, 4
 Aspect, 3
 Audit, annual, 102

B

Bain-marie, 13, 14, 53
 Bins, 36, 37, 41, 46
 Boilerettes, 9, 28
 Boilers: heating of, 7; jacketed
 9; vegetable, 8, 9
 Books, housekeeper's, 60, 61,
 62, 63, 64
 Bread machine, 20, 164, 165
 Breakfast, 112. *See also* Menus.
 Briffault stove, 8
 Butter-pat machine, 21
 Buying, 57, 58, 59, 60

C

Cafeteria, 13, 88
 Carbohydrates, 108
 Card index, 64
 Carving machine, 21, 164, 165
 Cash account, 97
 Cash book, 97
 Ceiling, 5
 Checking office, 55
 China, 26, 32, 49, 52, 95
 Chutes, 36, 37, 164, 165
 Cleaning: daily, 65, 66, 69, 70,
 71; special, 68, 69, 70, 71;
 weekly, 67, 68, 70, 71
 — material, 28, 48, 49
 Clerestory windows, 6
 Coal stoves, 7
 Cold storage, 42, 43
 Containers, 46
 Contracts, 58, 59
 Cooking apparatus, 8, 9, 10,
 11, 12, 164, 165
 Costing, 62; girls' school,
 136-47; men's hall of resi-
 dence, 156-61; orphanage,
 120-7
 — sheets, 62, 63
 Counter, 52, 53, 88, 89, 91,
 92
 Covers, 69, 70, 71
 Cupboards, 16, 44, 45, 66, 67,

 Cutlery, kitchen, 26, 92, 95

D
Dining-room clearing, 94
Drains, 66

E
Electricity, 7
Enamel ware, 15, 26
Equipment. *See* Apparatus
Esse stove, 8
Eveready stove, 8

F
Fat, 108
Fish fryer, 12
Floor, 4, 5, 65, 67, 69, 70, 71
Fuel, 7, 8

G
Gas, 7
Glazed asbestos, 4
Granitese, 4

H
Heaters, 13, 17
High tea, 113
Hoods, 12
Hoppers, 6
Hot closets, 12, 13
Hot-lock. *See* Trolleys
Housekeeper's, books, 60, 61,
62, 63, 64; room, 55

I
Ice cream machine, 21
Imprest account, 99

Income and expenditure ac-
count, 102
Inorganic foods, 108
Inventories, 62
Invoices, 61

J
Jam store, 49

K
Kitchen plans, 75, 78, 82, 86,
90; premises, 3, 4, 5, 6

L
Larders, 6; bread and cake,
40; general, 38; milk, 39;
vegetable, 41
Ledger, 97, 98
Ledges for trays, 96
Lighting, 6
Linen, 50
Linoleum, 15, 45
Liquid, 109

M
Main meal, 113
Market gardens, 59
Markets, 59
Mastication, 110
Meat block, 16
Menu board, 91
Menus, 112
— boarding school, boys,
summer, 128, 129; winter,
130, 131

Menus, boarding school, girls,
 summer, 132, 133; winter,
 134, 135
 — men's hall of residence,
 summer, 152, 153; winter,
 154, 155
 — orphanage, summer, 116,
 117; winter, 118, 119
 — residential club, winter,
 148, 149, 150, 151
 — women's hall of residence,
 winter, 162, 163
 Mid-morning lunch, 112
 Milk, 39, 40. *See also* Menus
 Minerals, 109
 Mixing machines, 19, 164,
 165
 Monel metal, 31
 Monthly statement, 61

O

Order form books, 60
 Organic foods, 107
 Ovens: bakers', 11; baking, 11;
 electric, 7; gas, 7; height of,
 11; steam, 7, 9, 10; storage
 heat, 7, 8
 Oven vents, 12

P

Paying, cafeteria service, 93
 Penthouse, 36
 Percentage discount, 59
 Petty cash, 97, 99
 Plans, 75, 78, 82, 86, 90
 Postages, 97, 100
 Potato bins, 41; machines, 19
 Protein, 107

R

Racks, vegetable, 42
 Receipt book, 97, 101
 Refrigerator, 39, 52
 Refuse, removal of, 35, 36, 37
 Returns counter, 53, 54

S

Saucepans, 28
 Saucepan stand, 18
 Scales, 47, 55
 Sculleries, pan, 35; vegetable,
 19, 34; washing-up, 30, 31,
 32, 53
 Served, 52, 53, 54, 89
 Serving dishes, 29
 Silver, 33
 Sinks, 16, 31, 34, 66
 Soup sieve, 24
 Staff, for cafeteria, 94
 Stainless steel, 15, 31
 Stalls, 59
 Steam, 7
 — ovens, 7, 9, 10
 Stores: 6, 44, 45; china
 (reserve), 49; cleaning ma-
 terial, 48, 49; cold, 42; con-
 tainers, 46; dry food, 46, 47,
 48; issuing, 50, 51; jam, 50;
 linen, 50; receiving, 50
 Stoves, 7, 8, 10, 11, 12, 66, 67,
 69, 164, 165
 Supper, 113. *See also* Menus

T

Tables, 14, 15, 65, 67, 164,
 165

Tea, 48, 113. *See also* Menus

Tiles, 4

Tin ware, 27

Trays, 92, 95

Trial balance, 101

Trolleys, 23, 54; heated, 24

U

Urns, 24

V

Ventilation, 5, 6

Vents, oven, 12

Vita glass, 3

Vitamins, 109

W

Wages sheets, 97, 100, 103

Walls, 4, 68, 69, 70, 71

Washing-up, 32; machine, 22,
164, 165

Wholesale buying, 57, 58

— merchants, 58

Windows, 5, 6, 68

Wood, 5, 15, 25

Work circuits, 73, 78, 79, 82,
83

